THE IMPORTANCE OF COMMUNICATION IN LAND USE PLANNING FOR INTERIOR ALASKA: A PARTICIPANT OBSERVATION STUDY

By

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Abstract

Three case studies (i.e., (1) FNSB Marijuana Zoning, (2) The Joint Land Use Study, and (3) Rethinking Smith Ranch) were examined in the context of land use planning to assist the reader in understanding some of the challenges a second-class borough in Alaska faces. The researcher utilized an opportunity with the Fairbanks North Star Borough to perform a participant observation study which demonstrated the complexity in engaging and communicating with citizens of the area. The researcher identified the three following critical themes and referenced planning literature to analyze them: (1) challenges to accomplishing goals, (2) the importance of communication, and (3) potential solutions to overcoming challenges. Upon identifying the challenges experienced both during the case studies, as well as outside of the case studies, the researcher determined possible solutions to help the borough's Department of Community Planning overcome the difficulties associated with communication and engagement of citizens.

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I. Introduction

This opus examines three land use planning case studies in the Fairbanks North Star Borough (FNSB): (1) FNSB Marijuana Zoning, (2) the Joint Land Use Study (JLUS), and (3) Rethinking Smith Ranch. In addition, various observed planning actions and experiences are included. The literature review is focused on land use planning and strategies for proctoring effective communication. The case studies are described in further detail in Sections III.A - III.C using the following three identified themes:

- challenges to accomplishing goals;
- the importance of communication; and
- potential solutions to overcoming challenges.

Good communication in community planning is linked directly to strong engagement and empowerment to encourage citizens to create healthy environments with the help of planners (Aboelata, Ersoylu, & Cohen, 2011). Through the use of visualization tools and methods such as geographic information systems (GIS) apps or image-driven presentations, the dialogue among community members and decision-makers can be stronger and more constructive as visual representation tends to reduce mistrust (Sui & Goodchild, 2011). The process of obtaining and expressing information should ultimately, improve the decision making process for stakeholders (Innes & Booher, 2004).

Yet, challenges arise in all forms of communication and processes can be hindered for planning departments when conditions involve the following:

- several methods are used to engage citizens such as letters, regular meetings, or the internet (Renn, Webler, Rakel, Dienel, & Johnson, 1993)
- technology is rapidly changing (Sui & Goodchild, 2011);
- necessary resources for the communication process are scarce (or too limited) (Nisbet & Scheufele, 2009);
- a weak local government structure (Ghose, 2005); a negative perception inhibits the opportunity to build trust among decision-makers and citizens (J. L. Creighton, 1991); and
- a general strong dislike for government as observed among citizens of the FNSB (Thomas, Savatgy, & Klimovich, 2016).

For the FNSB Department of Community Planning (DCP), some challenges may be overcome by investigating new strategies for citizen participation (Innes & Booher, 2004), developing a partnership with the community's university (Feld, 1998), employing the use of virtual reality in urban planning settings (El Araby, 2002), and fostering place attachment to cultivate partnership approaches to solutions (Manzo & Perkins, 2006). These potential solutions will be further investigated in section IV.

This opus combines observations from three case studies with available literature in the field of planning and citizen participation, and acknowledges the importance of communication between the parties involved with local-level land use planning. Challenges that the FNSB's DCP face are discussed in the context of existing literature, and potential solutions for overcoming these challenges are presented. Land use designation is an important part of development for a community as it aims to sculpt and protect the developing landscape in a responsible manner, focusing on compatible use with the topography and resources of the land. The use of land tightly connects planning to natural resource management, as land is a valuable natural resource and maintaining a high quality of life on it for current and future generations is

the ultimate goal for managers of Earth's resources. As John Randolph, a natural resources specialist who advocates for a coordinated approach to the issues of land use planning, management, and the impacts it has on the environment, stated, "the use of land is perhaps the most significant driving force in human impact on the natural environment" (2004, p. 42-43). He continued, "land development for human settlement and resource production poses critical impacts on the land itself, but also on water, air, and materials and energy use" (Randolph, 2004, pp. 42-43).

The DCP operates under the powers voted unto the FNSB, a second-class borough in the State of Alaska. Alaskan boroughs are roughly equivalent to counties in the contiguous United States. Under Alaskan statutes, second-class boroughs can exercise powers involving transportation systems, air and water pollution control, waste management, and animal control. Most importantly, "boroughs are responsible on an area-wide basis for the three mandatory functions of education, tax assessment and collection, and planning and zoning" (Morehouse & Fischer, 1971, p. 85). The focus of this opus is the FNSB department that handles planning and zoning.

Zoning is the designation of the FNSB into districts or zones, whereby each zone type requires different rules for varying land uses (Kelly & Becker, 2000). These rules are implemented to regulate the following:

- the use of the land or buildings;
- the intensity of whatever use that may be, characterized by lot size and height limits; and

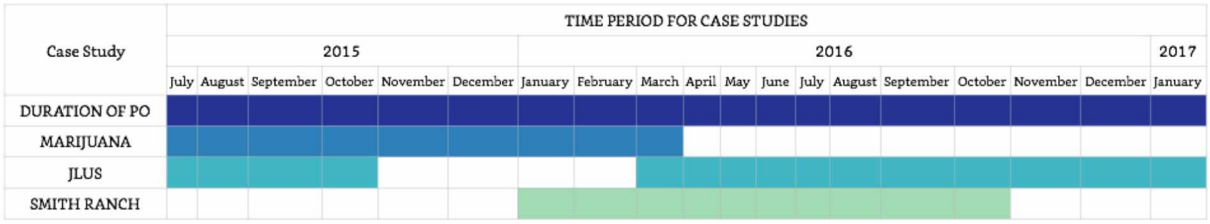

Table 1 - Time periods for case studies and the participant observation study.

- both directly and indirectly the extent of that use by implementing setbacks and lot portions for yards.

Kelly and Becker (2000) noted that in the field of planning common categories exist which define zones by use and intensity (e.g., agricultural, residential, commercial, and industrial). Fairbanks North Star Borough Code of Ordinances (FNSBC) Title 18 cites that the borough has a

My Internship, In Brief

I am the author and researcher for this opus. For 18 months, I worked in the Department of Community Planning (DCP) as an intern. I was originally hired to specifically work on the Joint Land Use Study (JLUS), to develop maps, send out letters, and attend meetings to take notes. When the JLUS came to a temporary standstill, the focus of my position became outreach based. I wound up spearheading social media-based attempts to engage citizens. I designed flyers for community meetings, orchestrated the marijuana permitting workshops on social media, community calendars, in the newspaper and on the radio, and worked toward achieving the goal of a communication process that requires the DCP and the public to unite in their communication with decision-makers.

As a result of my experiences, I began developing the first draft of the DCP's potential outreach plan. During my exit interview, Deputy Director Kellen Spillman and I discussed the importance of the outreach plan and he anticipated the eventual implementation of an outreach model for the DCP. As of January 2019, the outreach plan still needs to be reviewed, refined, and implemented.

During the process of each of the case studies, or outlying communication-driven planning matters, our attempts at connecting with the community were met with hurdles as well as accomplishments, which were rooted in experiences that motivated me to use my time with the Borough as a way to observe situations, relationships, challenges, and successes. Over time, the observations I made evolved into this opus. During my internship, I learned about challenges in land use planning by attending webinars and conferences and diving into the literature. I learned about FNSB-specific planning challenges by interacting with staff and citizens, silently observing, and regularly asking questions. Ultimately, I realized how substantial a document citing the challenges and the importance of effective communication could be for the planning department, and began finding ways to connect what I encountered during my internship with what the literature says about those kinds of experiences.

Text Box 1 - A narrative describing the basis for this opus.

total of 25 zones with distinctions ranging from "Outdoor Recreational" to "Heavy Industrial."

CASE STUDY	CHALLENGES IDENTIFIED DURING THE PARTICIPANT OBSERVATION STUDY	IDENTIFIED CHALLENGES IN FIGURE 1	IMMEDIATE SOLUTIONS TO OVERCOMING CHALLENGES	SOLUTIONS FROM LITERATURE
RETHINKING SMITH RANCH	• gaining citizen engagement in the process • lack of citizen engagement • negative perceptions of the FNSB • zoning challenges • interpretations of code that almost inhibited an outreach process (again)	• involving the public • limitations on planning authority • incorporation of several factors • skepticism of FNSB	• provide citizens with greater access to understand the planning process • help citizens understand planners are there to help, and want them to be engaged • get the citizens to feel more connected to taking good care of the community • develop an outreach strategy specifically tailored to situations similar to the residents' of Smith Subdivision • work with UAF to provide technically-enhanced opportunity for engaging citizens	• legitimize the agency's role in planning for the community by providing a better understanding of the DCP's roles and constraints (Bolan, 1989; Creighton, Priscoli, & Dunning, 1983; Hanchey, 1983; Morsehouse & Fischer, 1971) • Strengthen the relationships between the FNSB and the university (El Araby, 2002; Feld, 1993; Feld, 1998; Howard & Gaborit, 2007; Innes & Simpson, 1993; Joerin et al., 2009) • develop and implement an outreach plan (Catanese, 1974; Day, 1997; Elwood, 2002; Hanchey, 1983; Sanoff, 2000) • foster a greater, community-wide sense of place attachment (Brown, Perkins, & Brown, 2003; Manzo & Perkins, 2006; Reed, 1979; Thomas et al., 2016) • perform a needs assessment (The Community Toolbox, 2016) • better the interdepartmental communication (based on experience)
JOINT LAND USE STUDY	• negative side to involving the public • lack of citizen engagement • negative perceptions of the FNSB • time constraints/strict timeline the DCP works within • complex decision web • technical jargon • the long cycle of completing the project (began in 2006)	• involving the public • limitations on planning authority • incorporation of several factors • skepticism of FNSB	• provide citizens and policymakers with greater access to understand the planning process • help citizens understand planners are there to help, and want them to be engaged • get the citizens to feel more connected to taking good care of the community • develop an outreach strategy inclusive to all citizens - even those uninvolved in the JLUS process/JLUS property owner • work with UAF to provide technically-enhanced opportunity for engaging citizens	
FNSB MARIJUANA ZONING	• land use & zoning issues • encompassing lots of information at once • gaining HIGH citizen engagement in the process • lack of citizen engagement in the planning process • working with community partners • complex decision web of planning	• involving the public • limitations on planning authority • incorporation of several factors • skepticism of FNSB	• provide citizens with greater access to understand the planning process • help citizens understand planners are there to help, and want them to be engaged • get the citizens to feel more connected to taking good care of the community • develop an outreach strategy specifically tailored to situations similar to the residents' of Smith Subdivision • work with UAF to provide technically-enhanced opportunity for engaging citizens	
CHALLENGES NOT DIRECTLY LINKED TO THE CASE STUDIES	• understaffed department • lack of support from the other policymakers and/or decision-makers • inability to implement modern planning strategies because Fairbanks is different • lack of citizen engagement in the planning process • working with community partners • complex decision web of planning	• technology saturated field • lack of support from DM's • alaskan's general antipathy towards government • limited resources/ understaffed	• generate or utilize more resources by working closely with UAF • develop ordinances and ask for DM's support in enforcing code in the community • help citizens gain a better understanding of the planning calendar and cultural envelope of the DCP • connect citizens to their community by strengthening their understanding of their own ability to contribute to policymaking	

Table 2 - Highlights of the thought process leading to the establishment of themes for the opus.

According to Chapter 18.104 of FNSBC, when these zones are created, amended, enforced, or an individual submits a permit application requiring public testimony, the process demands involvement of the community. The FNSB DCP is responsible for implementing and enacting FNSBC Title 18. This code was written with intent to:

> …protect private property rights, to promote the public health, safety and general welfare of the residents of the borough, and safety from fire and to promote the efficient distribution of water, sewage, schools, parks and other public requirements; to provide safe traffic flow on the public streets; to promote economic development and the growth of private enterprise; and to divide the borough into districts (FNSBC 18.12.020, "Purpose", 2018).

II. Methods

This opus is the result of an 18-month (July 2015 to January 2017) participant observation (Table 1). Participant observation studies are considered qualitative research, a method by which an author takes part in the daily activities, interactions, and events of a group of people to understand group routines and procedures (Lofland, Snow, Anderson, & Lofland, 2006). The participant observation method was chosen for this opus in part because it lends itself to writing about the trends, challenges, and potential solutions for each case study, and primarily because a researcher may be able to notice elements of communication, process, and interaction that customers or employees (participants) are not able to recognize (Laitinen, Kaunonen, & Åstedt-Kurki, 2014). Text Box 1 gives a brief synopsis of the researcher's day-to-day experience during this study and elucidate the structure of this opus.

Table 2 provides the reader with the thought process of the researcher in the construction of this opus, highlights how the general themes presented themselves, and shows how the recommended solutions were determined for and applicable to each of the case studies.

During the study, the researcher kept thorough notes for reference in writing this opus, as well as files like meeting agendas and minutes to document occurrences or conversation topics amongst staff, with community members, and their one-on-one meetings with planning staff. Also compiled with this variety of files for bibliographic reference were were relevant articles published in *Fairbanks Daily News-Miner*, the local newspaper of Fairbanks, Alaska. These data and information were evaluated in the scope of a literature review by determining the relationships among the researcher's experiences in the case studies and scenarios documented in the literature. Conversations with department staff relating to historic and modern planning literature ultimately led to defining the importance of communication in land use planning. Cross-referencing experiences from the three case studies and the overall participant observation study with the literature was a main evaluation method for the opus. The three case studies demonstrated a variety of challenges and successes. Outside the case studies, additional challenges were identified and evaluated across the literature. Cross-referencing the details and experiences of each case study led to; 1) understanding both utilized and non-utilized engagement strategies of the FNSB DCP, 2) finding the effectiveness or ineffectiveness of communication completed through information exchanges among employees of the DCP and 3) discovering the overall reception of the FNSB's presence in the community.

The term 'communication,' as is the case with several terms in our vocabulary, could be defined or interpreted a variety of ways. Littlejohn and Foss (2010) noted that a definition should be evaluated based on how well it helps a scholar answer the question they are investigating. For this opus, 'communication' will be defined as (Nisbet & Scheufele, 2009) perceived it. Communication, by their standards, is interaction which results in the effective exchange of

information between persons who assist in the public's understanding of societal decisions and encourage participation (Nisbet & Scheufele, 2009).

III. Major Case Study Descriptions

The three major case studies used to describe challenges of the DCP were selected because they effectively demonstrated the importance of communication among policy-makers, citizens/citizen groups and decision-makers over the course of a planning process. Challenges related to the operation and interactions within the DCP are also discussed. Each case study also highlights the challenges faced by a recently established, underfunded, interior-Alaska planning department that is trying to keep up with with a general Lower 48 planning culture of strong dependency on technology-based strategies. The evaluation of these case studies provides effective engagement methods and other types of solutions to potentially help planners overcome the observed challenges. Figure 1, provided here, illustrates the challenges, along the various communicative pathways faced in the case studies which are represented by the blue circles. These challenges include:

- involving the public
- existing limitations on planning authority, and
- experiencing skepticism of the FNSB.

Figure 1 also includes the specific challenges faced by planners, categorized in this opus as policy-makers, in their day-to-day environment at the DCP, and are represented by the green circles. These challenges include:

- a technology-saturated field of work,

- lack of support from decision-makers

- general antipathy towards government

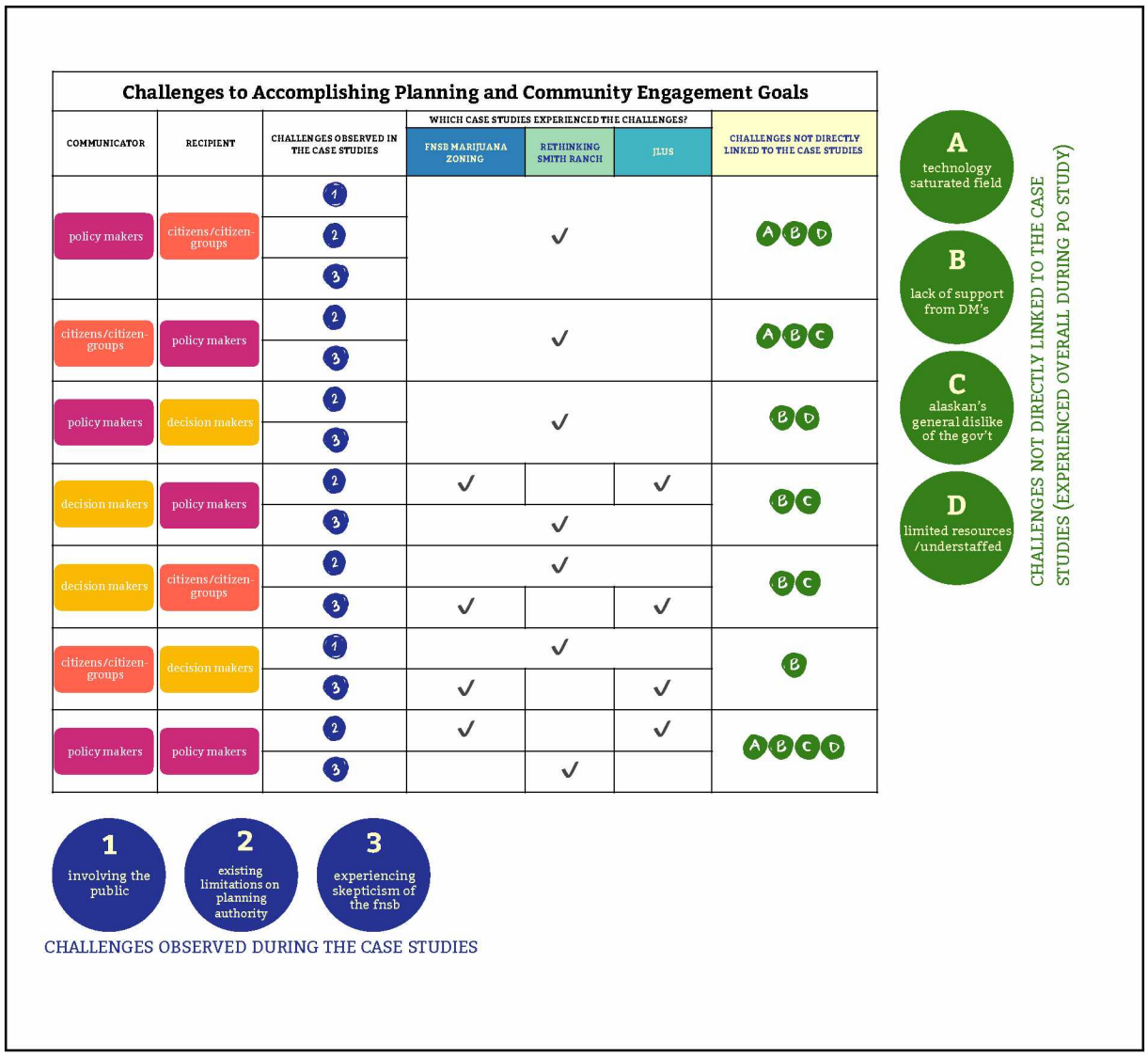

Figure 1 - This chart shows who was communicating when certain challenges impacted the case studies, or were experienced overall during the researcher's time at the DCP. This figure should be referenced in conjunction with Table 3.

- limited resources/being understaffed

Those in conversation about planning matters in this opus, identified as a communicator or recipient in Figure 1, are elaborated on in Table 3. Table 3 defines who the policy-makers, citizens/citizen groups, and decision-makers are. By conjunctively referencing Figure 1 and

Participating Roles in Communication

CASE STUDIES	COMMUNICATORS		
	Policy-makers	**Citizens/Citizen Groups**	**Decision-makers**

FNSB Marijuana Zoning	• the DCP
	• mayor
	• borough attorney(s)
	• community partners:
	  • City of Fairbanks
	  • City of North Pole
	  • military bases
		• schools
		• parents of underage children
		• sobriety centers
		• pro/anti marijuana advocates
		• entrepreneurs/potential business owners
		• grassroots organizations representatives
			• FNSB planning commission
			• FNSB Assembly

Rethinking Smith Ranch	• DCP planners • DCP intern • DCP deputy director • DCP director • road service area commissioners • representative(s) from mayor's office	• some present for 1970's attempted rezone • potential property developers • current residents • road service area commissioners	• FNSB planning commission • FNSB Assembly

JLUS	• DCP long range planner
	• DCP intern
	• DCP director
	• JLUS working group
	  • EAFB representatives
	  • FWW representatives
	  • CS GIS Specialist
		• property owners
		• potential property owners
		• anti-military/war advocates
		• military personnel
			• FNSB planning commission
			• FNSB Assembly

Challenges Not Directly Linked to the Case Studies	• DCP staff
	• borough attorney
	• mayor/representatives from mayor's office
	• community partners:
	  • City of Fairbanks
	  • City of North Pole
	  • military bases
		• land developers
		• current property owners
		• potential property owners
		• concerned citizens
		• business owners/ entrepreneurs
		• grassroots organizations
		• military representatives
		• political representatives
			• FNSB planning commission
			• FNSB Assembly

Table 3 - This table shows who the communicators were during the challenges in the variety of roles and scenarios mentioned throughout this document.

Table 3 throughout this opus, the reader should better understand which parties were communicating when. The following subsections aim to elaborate on the process of each case study. The importance, relevance and goals for including the case study are provided. Challenges not directly linked to a specific case study are also described. Each identified challenge is highlighted in the case studies and examined in relation to available literature in Section IV.

Figure 1 and Table 3 provide visualization to describing the researcher's synopsis of the challenges faced along certain communication pathways in these case studies. The dark blue

circles (challenges 1-3, Figure 1) represent the challenges that were observed during the following described case studies, which include:

- involving the public in planning decisions;
- limitations on planning authority; and
- skepticism of the FNSB.

The following subsections aim to elaborate on each of the case studies. The process of each case study is discussed. Each case study's importance and relevance to the opus is discussed, as well as what the goals were of including them in the overall opus. Also, the challenges not directly linked to the case studies (challenges A-D, Figure 1) are described. Each case study highlighted a variety of the challenges that came to be identified, and each challenge will be examined through the literature in Section IV.

A. The FNSB Marijuana Zoning Case Study

The FNSB marijuana zoning case study allowed particularly for the identification of challenges and solutions in outreach through the implementation of complex land use regulations to legalize cannabis. The FNSB DCP was the first of communities in the state of Alaska to publish its land use standards for cannabis businesses. Several other communities in Alaska extended the FNSB model to aid the planning, drafting, and implementation of their particular measures. The following subsections describe the process of the FNSB Marijuana Zoning case study, and elaborate on the communicative challenges encountered by policy-makers, citizens/ citizen groups, and decision-makers' process.

1. Process

In November 2014, Ballot Measure 2, the measure to legalize marijuana in Alaska, passed in nearly every precinct in the FNSB (Buxton, 2014). Just over 56% of the FNSB population voted in favor of the ballot measure for legal production and retail sales of the recreational, non-public use of cannabis. The DCP began extensively researching other marijuana-legal communities as a first step in the zoning process for cannabis businesses entering the FNSB. The DCP's research involved a comprehensive literature review by the Deputy Director, Kellen Spillman, Director, Christine Nelson, and some planners. Most governing authorities post their codes online, thereby providing those involved in the research phase access to important information, such as definitions, lot size requirements, and building

Figure 2 - An example of a buffer around a potential cannabis business. The parcel on which the business would reside is the pink outline, and the yellow represents a 1000-foot buffer around the parcel, which highlights the buildings within the radius, identifiable by GIS data.

heights, from locations that have already determined zoning for marijuana businesses. Nelson also visited jurisdictions in both Washington and Colorado in early 2015 so as to better visualize what the needs and future of Fairbanks might look like upon implementation of legal cannabis businesses (Nelson, 2016).

The land use regulations drafting process involved several participants. Upon the community-wide vote to legalize cannabis, then-FNSB Mayor Luke Hopkins promised to create a working group of stakeholders to represent the variety of concerns of the FNSB and surrounding area citizens. Over time, Hopkins' working group became a reality, and eventually grew to include "three local governments, law enforcement, educators from K-12 and higher education, substance abuse treatment advocates, and advocates for legalized marijuana" (Bohman, 2015). This working group of 35 members (Nelson, 2016) conversed at length about defining buffers for the marijuana facilities of the area. The user can set the buffer tool in ArcMap, a mapping software, to highlight potential conflicting uses, for this particular case, within the area of a set distance. For example, if no conflicting uses are allowed within 500-feet of a marijuana-related facility, a buffer could help define any such as, schools, alcohol establishments or churches, within a 500-foot radius, thereby determining the marijuana facility's allowed use, or lack thereof. Figure 2 presents an example of a buffer. Buffers are a mapping tool that the DCP uses frequently as they are useful for proximity analysis. This example demonstrates the importance and necessity of technology, more specifically GIS, in modern planning strategies discussed in this opus. With the surge of worldwide planning technologies, citizens need and expect data visualization tools such as mapping software, just like planners need tools like ArcGIS and other Esri products for evaluation (Howard & Gaborit, 2007).

Technological advancements, such as the use of GIS tools in the process of community planning will be discussed later in the opus.

In conjunction with addressing buffers and potential conflicting uses within the areas of marijuana facilities, licensing was an important topic of discussion at the working group meetings ("Questions for Working Group," 2015). The policy-makers including the mayor and planners (see Table 3), solicited opinions from the working group regarding the number and types of licenses that were to exist in the FNSB and City of Fairbanks. The working group also discussed criteria for the issuance of these licenses (e.g., first come, first serve; lottery; auction) as well as how the FNSB should coordinate with the community partners, the City of Fairbanks and the City of North Pole, on the licensing of marijuana facilities.

In sum, two town hall public meetings, three work sessions, two public hearings, several presentations to community partners, six working group meetings and many hours of research were required in order to determine the zoning standards and requirements for four types of commercial marijuana facilities (Nelson, 2016). As a result of outreach efforts of the FNSB's DCP, as well as Mayor Hopkins' prioritization of the project, in October 2015, the FNSB was the first municipality in Alaska to create zoning permit requirements for cannabis businesses (Bohman, 2015), making the FNSB community pioneers in a new industry, and an example for many other communities in the state. Everyone soon began looking to Fairbanks and ultimately the DCP for guidance in the process of incorporating legalized cannabis into the community responsibly and effectively. Anchorage began to draft their marijuana facility zoning regulations roughly one month before the FNSB's ordinance was approved by the FNSB Assembly (D. Kelly, 2015).

2. Importance and Relevance

This section identifies participants in the FNSB Marijuana Zoning case study, as well as as well as communication topics, the goals for including the case study and challenges observed during the process.

a) Who is Communicating?

As seen in Table 3, the policy-makers for this case study included the planning staff of the DCP, and the legal advisors from the FNSB's Mayor's Office, who assisted planners in drafting the ordinance language to amend FNSBC Title 18, or the zoning code, to accommodate marijuana facilities. The citizens/citizen groups included, but were not limited to, representatives of educational services/schools; parents of underage youth; sobriety centers; pro/anti-marijuana advocates; entrepreneurs and potential business owners; and representatives of varying organizations related to the movement. Finally, the decision-makers in the process involved the FNSB Planning Commission (PC) and FNSB Assembly. FNSBC Title 18-related issues or changes were presented first to the PC. For all decisions that begin with the FNSB DCP, if a proposal or amendment was approved by the PC first, it advances to the Assembly for final approval or denial. During this case study, policy-makers, citizens/citizen groups, and decision-makers, communicated with each other at different points in the process, as seen in Table 3. The topics of discussion varied across groups of communicators.

b) What is the Communication About?

The communicating parties of this case study (Table 3) were discussing responsible cannabis legislation. In developing such complicated, long-lasting, and entirely new regulations, it was essential for policy-makers to involve every relevant party in the process and express the

complex information to them as candidly as possible. The visions and desires of the citizens/ citizen groups were a primary focus of the policy-makers during this process. By engaging citizens/citizen groups in the drafting process for these regulations, policy-makers were able to crowdsource knowledge on marijuana facilities operations. Ultimately, policy-makers were afforded valuable insight to how other states legislated for recreational and medicinal cannabis businesses. The call for citizen engagement recognized in this case study also showed citizens that their knowledge and opinions were valued, not just heard.

Eventually, leaders from all parts of Alaska began asking questions about the FNSB's legislative process for marijuana legalization. At the 2016 Alaska Chapter of the American Planning Association (AK APA) conference conference held in Anchorage one month after the Assembly approval of the FNSB zoning ordinance, Nelson and Spillman presented the outreach process where motivated citizens discussed their concerns of legalized cannabis with the DCP. Community leaders from Juneau, Kenai, Kodiak, and Anchorage asked specific questions related to zoning and land use planning for Ballot Measure 2. These community leaders were also curious about what Nelson learned during her visits to Colorado and Washington, where she noted local-level practices in safety and zoning measures. Particular areas of interest concerning the FNSB's process included administrative considerations for changes in criminal activity, homelessness, hospitalization and the financial cost of operating marijuana businesses. The conversations and questions relating to this case study from the AK APA conference provided FNSB planners with a concise understanding of the information that they could relay to communities looking to legalize recreational cannabis. These conversations also demonstrated

that communities throughout the state might benefit from the FNSB DCP's exploration of communicative tactics and outreach efforts (i.e., what worked and what did not).

c) What are the Goals of Including this Case Study?

The FNSB Marijuana Zoning process showed the importance of (1) proctoring substantial involvement of citizens/citizen groups and interested parties, (2) developing responsible legislation of land use for the cultivation and sale of cannabis, and (3) engaging citizens/citizen groups through a customized outreach framework that was not necessarily proven to work within the community. Once the amendments allowing cannabis businesses were implemented into FNSBC Title 18, the DCP held two workshops to assist citizens/citizen groups, entrepreneurs, and soon-to-be business owners in their understanding of the complex regulations recommended by the working group. These workshops generated exceptional communication between policy-makers and citizens/citizen groups, and contributed to a draft outreach model for the FNSB DCP that is discussed later in this opus. Usually, attendance at workshops hosted by the DCP is minimal, highlighting how groundbreaking it was that at both of the FNSB Marijuana Zoning workshops, there was standing room only (Bohman, 2016). This unexpectedly high engagement with the outreach efforts of the DCP were recognized by the American Planning Association at the AK APA conference with the "Planning Team of the Year" award. In experiencing this success in citizen engagement and responsible land use planning, the FNSB DCP discovered a foundation on which to build future outreach strategies highlighting the biggest goal of including this case study in the opus. The "How to Get Your Marijuana Facilities Permit" workshops provided FNSB DCP with a foundation of effective outreach strategies.

d) What are the Identifiable Challenges from this Case Study?

This case study provided an understanding of the challenges planning departments often face, and offered an opportunity to cross-reference challenges and solutions with available planning process literature. The challenges observed in this case study were explicitly found to inhibit the general effectiveness of communication between the FNSB Marijuana Zoning case study affiliates.

B. The Joint Land Use Study Case Study

This case study allowed the researcher to identify key challenges and potential solutions for communication among departments, policy- and decision-makers, and community partners. At the time of this case study, the JLUS also required the articulation of very technical information, and challenged policy-makers to think beyond typically employed outreach strategies. The following subsections describe specific happenings during the researcher's involvement in the JLUS, and elaborate on who of the participating parties experienced challenges either in communication, or as a result of poor communication.

1. Process

The FNSB's DCP became responsible for implementing the JLUS in 2006 with funding and guidance from the Department of Defense (DoD), United States Office of Economic Adjustment (OEA). The nationwide program was initiated by the DoD in 1985 and has since seen implementation in over 100 communities that share land with military bases. As is the case with the FNSB, second-class boroughs can only enact certain powers area-wide. Some recommendations of the JLUS were outside the FNSB area, extending the responsibility of implementing the recommendations to the neighboring cities. The cities of Fairbanks and North

Pole collaborated with the FNSB to implement relevant JLUS measures in their communities. The JLUS began as an effort "to create a participatory, community-based framework for land use planning around military airfields" (FNSB JLUS Final Report, 2006) and aimed to encourage cooperative land use planning between bases and the surrounding community, as well as mitigate the impact that operations on military bases might have on adjacent, private land. In the context of the JLUS, cooperative land use is a planning strategy that acknowledges the minimization of land use which could impact the operation of the Fort Wainwright Army Base (FWW) or Eielson Air Force Base (EAFB), the two military installations surrounding or within the FNSB.

In August 2002, the DoD nominated the FWW base for a JLUS and, in September 2004, the DoD added the EAFB to this nomination, as the FNSB JLUS Final Report (2006) noted. The DoD recommended a Base Realignment and Closure (BRAC) in May 2005, which involved withdrawing roughly 2,800 uniformed personnel from the EAFB due to the costs of infrastructure development and operation (FNSB JLUS Final Report, 2006). The timing was imperative, as Fairbanks was facing a historic economic recession as a result of its boom and bust economy. The impending loss of the EAFB meant the potential reduction of 4,721 jobs in Fairbanks, which existed as a result of the influx of citizens in the community, due to the base, demanded greater retail and hospitality ventures in the borough (FNSB JLUS Final Report, 2006). By demanding a revision of the BRAC assignment and the FNSB Comprehensive Plan, in September 2005, the citizens of Fairbanks helped to reverse the decision to close the base. Comprehensive plans are a common planning tool utilized to provide a tangible representation of what a community wants to be in the future (Kelly & Becker, 2000). In the effort to continuously foster compatible communities between the base and the FNSB, the DoD initiated the JLUS soon

after the BRAC to the EAFB was canceled. The FNSB's JLUS focused on determining potential land use conflicts, establishing actions that the FNSB could pursue to ensure future compatible community development (FNSB JLUS Final Report, 2006), and creating an action plan that the DoD and FNSB could follow. The JLUS, which commenced in September 2005, involved serving the community and military interests and creating strong lines of communication between community partners to "ensure positive dialogue and, thus, minimize the potential for conflicts" (FNSB JLUS Final Report, 2006).

When the preliminary phases of the JLUS were complete, the FNSB received 13 recommendations to implement with community partners in the effort to ensure compatible community development. As previously mentioned, the community partners such as the cities of Fairbanks and North Pole share land areas with the FNSB, as well as the political powers, and a few of the JLUS recommendations required deferment of implementation measures to community partners' leaders and decision-makers. The JLUS recommendations for the FNSB required communication, planning, and public policy for decisions leading to community development to be compatible with the bases; implementing tools to encourage sound attenuation in homes outside of the bases; and coordinating with community partners to foster compatible and safe living environments. The military was given 22 recommendations to implement on the bases making them more compatible to the surrounding communities' living environments. The JLUS recommendations for military operations focused on strengthening public outreach efforts and communication of significant operational changes on base(s); implementing a noise augmentation management program; and avoiding flying over residential areas to the extent practicable.

The FNSB and military bases adopted and implemented several of the recommendations almost immediately. A few of the recommended tools for the FNSB were time intensive, which precluded immediate implementation. Noise, height, and density/safety overlays, common tools for regulating development in certain areas or zones, demand large amounts of staff time to research data, manipulate it, and strategize public education and outreach. In short, the development and implementation of the ordinances to accommodate the JLUS recommendations were demanding of current staff's time, and additional staff was needed to aid the process. While the DCP did its best to implement the recommendations within the original timeline of the JLUS, the DoD grant that funded the project expired before the full implementation of the recommended solutions could occur. Therefore, the DCP had to put the implementation of the JLUS recommendations on hold. In 2015, the DCP applied for another DoD grant to finish the JLUS and hired an intern (see Table 1). The intern was soon a part of the development and implementation process for the Military Noise Overlay (MNO) and the beginning phases of the Military Height Overlay (MHO).

2. Importance and Relevance

This section addresses who was communicating during the JLUS case study, as well as what their communication was about, what the goals of including the case study in the opus are, and what the researcher identified as challenges in observing the process of this case study.

a) Who is Communicating?

The policy-makers for this case study included the DCP's long-range planner, director, intern, and the FNSB Computer Services Department's GIS Specialist, as well as representatives from the EAFB and FWW. The citizens/citizen groups for this case study included existing and

potential property owners, military personnel, and anti-military advocates. As with the FNSB Marijuana Zoning case study, the decision-makers were the PC and Assembly of the borough.

b) What is the Communication About?

Communication in this case study primarily involved discussions related to technical data and information that went into the development of the MNO ordinance. Staff of the DCP coordinated with military representatives to develop ideas and solutions for anticipated challenges during the implementation process of both the MNO and MHO. Communications between policy-makers and citizens/citizen groups became difficult when citizens did not understand the information presented during community outreach, PC, and Assembly meetings. In addition, coordinating working group meetings between policy-makers of this case study proved to be challenging and was observed to prolong problem-solving and ultimately the implementation of ordinances.

c) What are the Goals of Including this Case Study?

The aim of the JLUS for any military base is to foster compatible communities between the military bases and the areas surrounding them. In the FNSB's case, the JLUS recommendations were made to promote responsible and compatible land use by notifying residents of military noise, keeping development to a height minimum to avoid flight path interference, and ensuring that the density of citizens in an area near a military activity area does not reach a critical number. Upon implementation, the JLUS goal is for the recommendations to protect the health, safety, and welfare of the residents of the borough. This case study aided policy-makers in finding value in the use of data visualization to express technical information during the implementation process to both the citizens/citizen groups and decision-makers

mentioned above. With the general success of showing data to the participants of the decision-making process for the MNO and particularly, by using GIS data visualization strategies, the researcher realized that data visualization could be the key to overcoming other communication barriers mentioned throughout this opus. The DCP's success with data visualization and the articulation of complicated information through it during the JLUS case study underscores the importance of effective communication with citizens/citizen groups. This case study is therefore included in this opus in hopes of further demonstrating the intricacies of involving the public, the limitations on the policy-makers, and the skepticism of the FNSB that exists among citizens.

d) What are the Identifiable Challenges from this Case Study?

Like the FNSB Marijuana Zoning case study, the JLUS case study provided the researcher with an opportunity to apply their stronger understanding of challenges documented within planning literature. This case study also provided the researcher with opportunities to learn about potential solutions for communication challenges of community planning culture in planning literature. The identifiable challenges for this JLUS case study include:

- involving the public;
- limitations on planning authority; and
- existing skepticism of the FNSB.

Figure 1 correlates the challenges observed during this case study, as well as the other case studies, with the communicative relationships that were impacted by them. These challenges are further defined in Section IV.

C. Rethinking Smith Ranch

This case study allowed the author to identify key challenges and potential solutions in the aspect of public involvement. The Rethinking Smith Ranch case study, one involving a specific subdivision in the FNSB, was important to defining both effective and non-effective communication with citizens/citizen groups. The process was continuing from its controversial beginning in 1978. This case study elaborated on the importance of always involving the citizens/citizen groups in decisions, particularly when it concerns their property and other land use matters. Data visualization was also important to the Rethinking Smith Ranch case study, as it aided the participating citizens' understanding of the land use challenges faced in the subdivision. The following subsections elaborate on the process of the Rethinking Smith Ranch case study, and define its communicative errors and successes and clearly show its importance to this opus.

1. Process

The Smith Subdivision, an area in Fairbanks referred to as "Smith Ranch," had a long and colorful history leading up to the case study detailed here. Just across from the Fairbanks International Airport, this neighborhood's zoning dictated that one could not build within 25 feet of a lot line (Bohman, 2016), yet each lot was only 50 feet wide. In his staff report for the FNSB Assembly, Spillman noted that the "primary land use problem in Smith Ranch [was] its rural-based zoning, Rural Estates-2 (RE-2), on urban-sized lots that [had] the option to be served by sewer and water utilities" (Smith Ranch Staff Report, 2016). In 1978 the area was more rural and the assigned RE-2 zoning designation made sense due to the lack of water and sewer services.

In 1978, FNSB Code Enforcement Officer Rex Nutter approached the PC having concluded, after researching the Smith Ranch area for six months, that it was a "continual problem for residents to comply with setback requirements and other zoning requirements" (Spillman, 2016). Nutter's request to rezone to a more accommodating zone was approved by the PC and then presented to the FNSB Assembly. The residents of Smith Ranch testified that they were surprised to learn that the issue was coming before the Assembly and did not appreciate feeling forced into a decision (Spillman, 2016). Several residents who testified were opposed to this proposed rezone and wanted their zoning rules and regulations to be left as it was. According to the official minutes from this July 27, 1978 Assembly meeting, not many of the citizens in attendance of the meeting were in support of rezoning and the motion failed.

For decades, to the best of its ability, the DCP aided residents in the Smith Ranch neighborhood encountering development challenges, primarily due to the significant setbacks for buildings coupled with small lot sizes (Spillman, 2016). The 2005 FNSB Comprehensive Plan noted the challenges of Smith Ranch and added determining a neighborhood-wide resolution to the DCP's list of items to address (Bohman, 2016). Finding a solution finally became a focus for the department under Spillman's leadership in the spring of 2016. The residents' sensitivity surrounding the topic of a rezone was of significance for the Rethinking Smith Ranch team of policy-makers, as almost all of the residents who were involved with, or testified against, the 1970s rezone attempt still reside in the area. A thorough reading of the minutes from the 1978 borough meeting clarified that many who testified did not fully understand what the DCP and its Code Enforcement Officer were trying to accomplish with the rezone effort. Many stated that they did not want the neighborhood to change and conversation at the meeting showed that the

residents felt threatened and harassed by the FNSB. Therefore, those involved in the 2016 rezone attempt knew that effective communication would be necessary and a strong outreach strategy critical.

The Mayor's Office and the DCP developed an outreach process that included one-on-one conversations with property owners, two community meetings, flyers posted in locations relevant to residents of Smith Ranch, newspaper ads, group emails, and letters to the neighborhood with a request for comments (Spillman, 2016). The planners created bulletins citing the history of Smith Ranch as a way to communicate with the property and business owners who were unavailable via other means. These outreach strategies provided the planners with insight to what the majority of the neighborhood supported or opposed. Policy-makers were able to present a new rezone ordinance to the FNSB Assembly with the backing of a strong, inclusive, and successful outreach strategy. As a result of the policy-makers' work, decision-makers were able to be confident in their decision to support the rezone and pass the ordinance. On September 22, 2016, the mandate to rezone Smith Ranch from RE-2 to Two-Family Residential was unanimously approved by the FNSB Assembly. Property owners in Smith Ranch now have setbacks on lots that are significantly more accommodating for residential development. They also have a stronger discourse with the FNSB DCP.

2. Importance and Relevance

This section addresses who was communicating during the Rethinking Smith Ranch case study, as well as what the communication was about, what the goals of including the case study in the opus are, and what the author identified as challenges in observing the process of this case study.

a) Who is Communicating?

The bulk of the communication occurring in this case study was among the policy-makers and citizens/citizen groups. As seen in Table 3, the policy-makers included the DCP's planning staff (e.g., planners, director, deputy director, and intern), the road service area commissioners of Smith Ranch, and a representative from the Mayor's Office. The citizens/ citizen groups included some of the individuals who were present for the 1970s attempted rezone, potential land developers, existing and future property owners, and the road service area commissioners of the Smith Subdivision. The road service area commissioners were included as communicators in both the policy-makers and citizens/citizen groups because they gave valuable information to planners drafting the ordinance and represented the citizens of the subdivision. The decision-makers of the Rethinking Smith Ranch case study included the FNSB PC and Assembly.

b) What is the Communication About?

The information exchange occurring between these parties focused on determining a solution for the zoning challenges faced by residents of the subdivision. The residents wanted to know what challenges they were facing and what options they had for resolutions. They also wanted to know what the DCP's particular role was in the borough and how their continued involvement in policy-making as citizens/citizen groups and as a community of concerned residents could impact future decision-making. During this case study, the policy-makers were able to break through many challenges involving communication and negative perceptions of their work. As a result, policy-makers were able to generate multiple, constructive conversations

with a mistrusting group of citizens, which evolved into an AK APA award-winning project (Woldstad, 2016) and shifted a neighborhood-wide attitude about borough governance.

c) What are the Goals of Including this Case Study?

The primary goal of including this case study is to highlight the way the FNSB assisted residents of a community faced with property development challenges in determining a solution to these challenges. The DCP hypothesized that a large scale rezone was likely the solution to Smith Ranch's land use challenges, but recognized the importance and legitimacy of engaging Smith Ranch community members the before prescribing any solution to the neighborhood. This case study also emphasizes how the steps taken to salvage a historically negative relationship between Smith Ranch residents and the DCP resulted in a strong, positive dialogue between the parties. Door-to-door efforts and community meetings revealed the power of effective and positive communication with residents and how valuable transparency is to citizens.

d) What are the Identifiable Challenges from this Case Study?

This case study displays an environment where the researcher gained unique insight into challenges concerning citizen perception of a governing municipality, as well as a stronger comprehension of the importance of citizen involvement from the beginning of a process to the end. Figure 1 shows the identified challenges faced in this Rethinking Smith Ranch case study, as well as who the communicators were during each scenario when the challenges were observed. The identifiable challenges for this Rethinking Smith Ranch case study include:

- involving the public;
- limitations on planning authority; and
- skepticism of the FNSB.

These challenges are further defined in the next section.

IV. Challenges to Accomplishing Planning and Community Engagement Goals

This section aims to address the challenges mentioned in the above descriptions and observed during the participant observation study. The challenges will be discussed in two sub-sections. The first section, A. Challenges Observed in Case Studies, discusses the challenges of (1) involving the public, (2) limitations on planning authority, and (3) skepticism of the FNSB, all of which present hurdles to effective communication between the participating parties. These challenges were first noticed during the case studies. The second section, B. Challenges Not Directly Linked to the Case Studies, discusses the challenges of (1) a technology-saturated field, (2) lack of support from decision-makers, (3) the general dislike that Alaskans have for government, and (4) limited resources/understaffing. These challenges regularly impede effective communication among policy-makers, citizens/citizen groups, and/or decision-makers.

A. Challenges Observed in the Case Studies

This section presents challenges described during the FNSB Marijuana Zoning, Rethinking Smith Ranch, and JLUS case studies (1-3, Figure 1). All three of the case studies revealed challenges while various parties were communicating (Table 3).

1. Involving/Engaging the Public

Involvement of the public in local level politics is required by state law and also crucial to a sound planning process. Sanoff (2000) noted the importance of citizen engagement in planning culture, coinciding with Ghose's (2005) opinion that involving the community is a

crucial element to the planning process. Planners, particularly in the FNSB DCP, find it challenging to engage citizens unless an issue pertains to them or their property. During the case studies, the general population of the FNSB was observed to not participate in many of the planning decision processes (i.e., a parcel rezone or an amendment to code), which suggests, in knowing such about the general population of the FNSB, that the local-level planning issues at hand did not necessarily pertain to them. This lackluster engagement in land use planning processes was frequently observed to be a topic conversation amidst planners who participate in conferences and webinars all over the United States.

In contrast to the positivities of gaining public involvement in a planning decision, through the case studies the researcher learned that adverse encounters also occur when asking the public to be engaged with the planning process. In other words, citizen involvement can be disruptive during crucial moments in the planning process. The anticipation of adverse encounters with the public on potentially contentious planning matters was noticed to cause hesitation amongst planners to be as active in outreach efforts as current planning strategies recommend.

As seen in Figure 1, participants of each case study encountered challenges to involving and engaging citizens/citizen groups. Both policy-makers and decision-makers faced challenges when communicating with citizens/citizen groups (Figure 1). During the FNSB Marijuana Zoning and Rethinking Smith Ranch case studies, substantial, constructive citizen participation seemed to be a lofty goal. Before the first FNSB Marijuana Zoning workshop, held at the end of the regulation drafting process, policy-makers expected few citizens to attend. Similar doubts existed before the Rethinking Smith Ranch community meetings as well. The researcher found it

worth speculating that the reason for these doubts stems from policy-makers repeatedly experiencing the same, minimal turnout to land use planning initiatives. In its lengthy duration, the JLUS case study well exemplifies such a pattern.

The JLUS Final Report (2006) cites an outreach campaign focused on ensuring citizens knew about the JLUS and which properties might be impacted by the recommended amendments to FNSBC Title 18 resulting from the JLUS. Theoretically, this outreach campaign for the JLUS should have deterred citizens from feeling excluded or as though the FNSB was not being transparent. However, when the community meetings occurred during the implementation of the advisory MNO, policy-makers were met with remarks that showed the citizens were feeling uninvolved or deliberately excluded from the process. Creighton et al. (1983) discussed the lack of confidence and trust that citizens feel if they are not included or engaged in the process leading to an ordinance approval. In the case of the JLUS, citizens' trust in the FNSB DCP dwindled as a result of their feeling uninformed. In observing both the policy-makers who did their best to reach out to property owners under the MNO and these citizens feeling uninformed, challenges to effective engagement became apparent.

In notifying citizens of community meetings and the opportunity to testify in favor of or against the MNO, the DCP sent over 200 letters to property owners who owned parcels under the potential, advisory overlay. The letters described the overlay and invited property owners to community meetings where they could discuss the proponents of the overlay with the policy-makers. Few recipients of the letters from the DCP attended the meetings. Perhaps the time lapse between the study portion of the project (2006) and development of the ordinance to implement its recommendations (2015) was the cause of few people attending. Potential concerned property

owners had simply stopped paying attention to the issue. After these community meetings were held and the MNO ordinance had been fully drafted and brought to the planning commission citizens *then* attended and simultaneously claimed they had never been notified of the ordinance before it progressed to this stage.

While the FNSB Marijuana Zoning and Rethinking Smith Ranch case studies demonstrated heightened engagement, the methods utilized to gain such participation were conventional. Some of the methods used for the JLUS were also conventional and did not heighten engagement to the same degree. Regularly employee attendance to planning centric webinars and conferences is part of the practice at the FNSB DCP, and many of these informative sessions offer newer strategies for citizen engagement because, as Innes and Booher speculated (2004):

> the traditional methods of public participation in government decision-making simply do not work. They do not achieve genuine participation in planning or decisions; they do not provide significant information to public officials that makes a difference to their actions; they do not satisfy members of the public that they are being heard; they do not improve the decisions that agencies and public officials make; and they don't represent a broad spectrum of the public (p. 3).

While beneficial to the department in a number of ways, the recommendations in gaining citizen participation these planning focused webinars and other learning tools provide are not yet completely applicable to the FNSB. Established in 1964, the FNSB is a a more recently developed municipality in comparison to other boroughs in the United States. Attributable in part to this youth and inexperience, citizens still do not trust a lot of the FNSB's work, and the FNSB also does not yet possess the toolkit, or tried and true methodologies, necessary to practice or implement the new engagement practices gaining popularity in older U.S. communities. In short,

the FNSB's governing processes and practices are still evolving. Noteworthy uncertainty about what good citizen participation looks like in practice also exists amidst planners worldwide, and little agreement between scholars exists about what citizen participation is precisely supposed to accomplish (Day, 1997). Section B.1 Technology Saturated Field focuses on discussing in detail the challenges of implementing some of these strategies.

The JLUS case study featured the DCP's inability to get citizens involved early in an ordinance's advancement to the PC and Assembly. However, this particular case study also revealed the type of citizen participation that is undesirable to, and even feared by, policy-makers and decision-makers. The final meeting held to discuss the implementation of the MNO involved an anti-military activist group derailing the decision-makers' conversation and shifting the focus of the meeting to alternative, anti-war, and anti-military points. As noted by Bleiker (1981):

> an inappropriate form of [citizen participation] used at the wrong time cannot contribute anything to the project and, yet, it uses up everyone's time and effort. This kind of citizen participation is resented not only by project staff; the public resents it just as much (pp. III-I-2)

Bleiker's sentiments propose a conundrum concerning citizen involvement and engagement in a planning process and discourages policy-makers from engaging citizens (Day, 1997). Day (1997) noted that problems can result even when citizens are engaged, as the outcome of involvement might not truly reflect the aggregate of the citizens' preferences or interests (1997). So as to reiterate this point of Day's (1997), the individuals who showed up to protest the JLUS MNO did not own property that would be affected by the advisory-only overlay. They were there solely to express an opinion on a trivial matter for that specific Assembly meeting. This expression of distrust and lack of acknowledgement for the policy-

makers' and decision-makers' expertise disrupted the process and a valuable amount of time was then spent addressing the inappropriate use of the public testimony period, rather than the topic slated for the agenda. Then again, as Sanoff (2000), an advocate for always involving the public in local decision-making processes noted, "The absence of conflict usually means that different viewpoints have been excluded from the decision-making process" (p. 29), and mentions that conflict can be beneficial because it broadens the view of what is possible, and might allow for more choices as a result.

2. Existing Limitations on Planning Authority

Weaknesses exist in the complex decision-making structure of the municipal planning process (Ghose, 2005) that tend to hinder effective communication among policy-makers, citizens/citizen groups, and/or decision-makers, and thereby limit the planning authority in their ability to accomplish tasks. The following highlights what limitations on planning authority impacted all three case studies when the policy-makers were communicating with the citizens, decision-makers, and/or each other (Figure 1):

- the complexity of the "cultural envelope" (Bolan, 1969) of planning and how citizens oftentimes perceive the operations of the DCP to be confusing, unnecessary, or drudgerous as well as the constraints planners often experience within it (i.e., strict timelines, negative public perception, existing land use/zoning challenges, turnover of mayoral staff), and
- the powers of a second-class borough and the confusion that occurs when decisions are transferred from one decision-making body to another (i.e., borough to city).

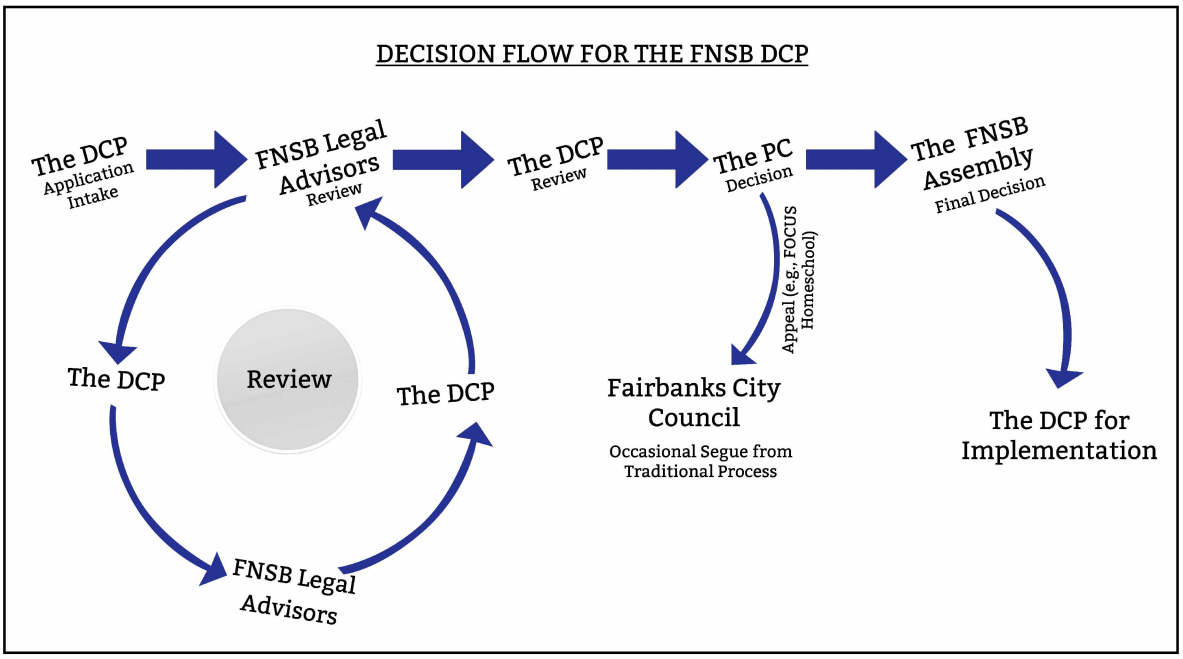

Figure 3 - This diagram shows the multiple decision-makers involved with land use planning decisions.

These limitations were observed during all three case studies (Figure 1) as well as the overall participant observation study. This section describes how the limitations on planning authority add to their challenges in communication and productivity. An aspect of the challenges is the citizens' misunderstanding of how quickly their permit is to be approved, or who makes the final decisions. Figure 3 aims to provide a visual to the decision-making process, and is useful to the examples this section provides as it shows how the DCP is only one participant in the decision-making process. It also shows how the framework the planners work within is highly dependent on the timing and decisions of others.

To describe Figure 3, the planners receive applications at their counter, research the property, and propose to approve or deny the application based on their research, the departmental interpretation of code, and expertise as a planner. Once a planner gets their case approved by the DCP director, the case goes to the borough attorney(s) (i.e., FNSB Legal

Advisors) and the planner awaits edits, approval, or denial. Once approved, after potentially a lot of back-and-forth in the review process, the planner who worked on the case presents it to the PC. If appealed, like the FOCUS Homeschool case explained shortly, the decision transfers to the Fairbanks City Council. If approved, it continues to the FNSB Assembly, where the final decision is made on the matter.

As Bolan (1969) noted in the *Journal of the American Institute of Planners*, "The community decision arena could be considered the "culture" of planning, since its rules, customs, and actors determine the fate of community planning proposals. Understanding the nature of this cultural envelope will help in determining appropriate strategies and techniques for planning" (p. 301). In sum, the difficulty for citizens or other involved parties (Table 3) to navigate the unfamiliar, cultural envelope, or framework of community planning, limits some policy-makers' potential to accomplish their goals and achieve effective communication. This challenge of the various communicators (Table 3) not fully understanding the cultural envelope of planning, or the framework planners work within, was observed to impede effective communication between all parties (Figure 1) during all of the case studies as well as overall during the participant observation study. The limitations observed within the cultural envelope of the DCP include the complexity of the planning process for both citizens/citizen groups, planners, and other policy-makers, existing land use and zoning challenges, time constraints on planners, the turnover of mayors (which happens every 3-6 years), and the turnover of staff, commission members, and FNSB Assembly members.

The permitting process to obtain approval for businesses, stores, home improvements, driveway installations, and other land use related business is lengthy and can be a source of strife

for citizens. Oftentimes, the researcher for this opus overheard, "It is just easier to ask for forgiveness rather than for permission with community planning," and it was soon recognized that a large population of the FNSB's land owners generally avoid coming in to the DCP with property-related questions as a result of this notion. What land owners do not understand, as mentioned above, is the complex framework that the planners, who are helping them in their permitting process, work within.

To describe Figure 3, typically the DCP will receive a permit application at its counter and distribute it to the appropriate (or most available) planner. A planner then reviews the application and sends their recommendations (i.e., approval or denial) to the borough attorney in the FNSB Legal Department. The borough attorney then determines next steps for the application. Sometimes, the attorney(s) will require simple edits, more research, or more time to review, depending on the case and this part of the process can present a lot of back-and-forth between planners and the attorney(s). The decision-making process can be indefinitely stifled at this phase, and for many, requires a lot of patience. The undeterminable waiting period for permit approval was noticed to be a source of citizens' apprehension to apply for land use permits, as many stories exist of citizens not being approved for a business license or a home addition in time for the reason they are applying in the first place (i.e., outdoor marijuana cultivation facility and the short growing season). Which, in turn, perpetuates the negative image and misguided public perception of the DCP. Instead of perceiving that the DCP is doing its best with the resources it has and within the tight timeline it almost always works within, citizen emotion was recognizably dominated by frustration during the permitting processes observed in the participant observation study.

The back-and-forth between the attorneys and planners is typically attributable to the varying interpretations of the same language in FNSBC Title 18. This varying interpretation of codified language was noticed particularly to occur for the DCP after a turnover of FNSB Legal Department staff and/or the election of a new mayor. When planners (Table 3) were communicating with citizens during the JLUS case study, different interpretations of FNSBC proposed a challenge, as the borough attorney almost did not allow the planners to prepare to reach out to citizens prior to the development of the ordinance. Citizen participation, by the planners' standards, was considered crucial to the next phase of the JLUS and the implementation of another overlay. The borough attorney at the time interpreted the FNSBC differently, and perceived reaching out to the public before drafting an ordinance to be misaligned with the codified langue.

The election of a new mayor can also contribute to the DCP's challenges in combating widely recognized zoning or land use related obstacles, as new mayors prioritize tasks of the FNSB differently. Sometimes, a measure or ordinance that the DCP was working on with a former mayor will be indefinitely postponed or even disregarded by a new mayor, if they do not see its importance to meet that of other FNSB related issues (i.e., emergency operations, facility maintenance). Citizens oftentimes do not familiarize themselves with a potential new mayor's priorities in borough decision-making during elections or in their timing of applying for land use permits.

Some of the following examples show how the existing limitations on the DCP's capabilities became apparent during the researcher's time in the DCP. The zoning in the FNSB proved to be a limitation to the policy-makers, and thereby challenging to their efforts. Some of

the more relaxed zones strain the planners' ability to define responsible land use regulations, especially in coherence with what the citizens desire based on their rights to the land that they own. With the FNSB Marijuana Zoning case study, in particular, months were spent defining the areas that could comply with state regulations, the vision of pro and anti-marijuana advocates, and the rules of community partners for marijuana businesses.

Planning around these zoning constraints proved to be a difficult task that impeded the planning process as well as the communication to citizens about where entrepreneurs could erect a cannabis business. Table 3 elaborates on the citizens/citizen groups who were articulating their needs when the conversation came to implementing the legalization of cannabis into the community. Part of what complicated planning for the zoning component of the FNSB Marijuana Zoning case study was the need for policy-makers to include the concerns of the citizens who were either pro- or anti- cannabis. Cannabis business entrepreneurs needed real estate potential in tourist-dense areas while churches and schools needed at least 500 feet of separation from cannabis businesses. The downtown area of the FNSB is known for its crowded, mixed zoning. At the time of the FNSB Marijuana Zoning case study, this downtown core presented many viable locations amidst the mixed zoning for potential cannabis business entrepreneurs, but also houses a dense population of churches and schools. With churches, schools, and potential cannabis business locations being in such a compact, already densely developed area, planners were immediately challenged to overcome the zoning by strategically drafting the legalized cannabis implementation standards to accommodate each of the participating citizens/citizen groups.

The Rethinking Smith Ranch case study faced similar limitations. A conversation about the zoning of the neighborhood was initially perplexing to the citizens. The community of Smith Ranch historically experienced development challenges for single lots, attributable to the zoning of the neighborhood. In implementing the MNO, the limitations of policy-makers that were recognized during the JLUS relate to the federal requirement of the borough to involve the public through advertisements and letters. Including citizens in the planning process is of significance, and the concept of citizen participation is a large part of this document. However, the overlay was advisory, and it is arguable that the protest at the JLUS MNO Assembly hearing occurred because the overlay was required to be advertised.

Various challenges manifested as a result of the limitations placed on the planning authority when the policy-makers were trying to communicate with each other, particularly during times involving the DCP's calendar. Multiple times over the duration of the case study (Table 1), deadlines were pushed back or missed due to a lack of communication between the planners and the community partners representing the FWW and EAFB military bases. Part of the process also required the planners to present to, and gain support from Fairbanks City Council, briefly deferring the FNSB-based decision to a community partner, which also required policy-makers to patiently await being worked in to the City Council's schedule. Ultimately, implementation of the JLUS MNO was observed to be impacted by a number of factors that limited the DCP's ability to accomplish goals. During the JLUS case study, the researcher realized that other policy-makers, or community partners (Table 3), much like citizens/citizen groups, also struggled to grasp the full understanding of the limitations the DCP's planners are working within.

The other challenge to fall under the umbrella of the limitations on planning authority for the DCP is that of the FNSB being a second-class borough in Alaska. Decision-making processes for a second-class borough can become complicated and deviate from originally anticipated avenues of discussion. Second-class boroughs also, as discussed early on in this opus, only possess certain governing powers for the area to which they are designated. When decisions are deferred to other governing entities, typically from the FNSB Assembly to the Fairbanks City Council, citizens are left confused and the FNSB is at a loss for all of the work it did up until that point. The case of FOCUS Homeschool provides an example to this limitation of being a second-class borough and how it can become a source of frustration and confusion among engaged citizens. which is unrelated to any of the case studies in focus of this opus, yet valuable to the point of this section. While not part of the case studies, this briefly mentioned anamnesis of FOCUS Homeschool's permit application experience highlights further limitations of the DCP.

FOCUS Homeschool filed for a conditional use permit with the FNSB DCP. After careful research, the planners found no reason to deny the permit and recommended its approval to the PC. The PC approved it. Neighborhood residents appealed the approval before its FNSB Assembly hearing date. This appeal went in front of the Fairbanks City Council. The suit was, therefore, not handled within the FNSB. Deciding the exact opposite of what the PC had, the Fairbanks City Council denied the permit for FOCUS Homeschool. This process occurred because the FNSB is a second-class borough and has specific, outright powers and managing appeals of decisions is not one of them. The public can vote into effect some secondary powers that the borough may operate under (Morehouse & Fischer, 1971), like the ability to take in appeals.

This example of FOCUS Homeschool's case shows that at times, decisions made about properties, or appeals to a decision made within the borough, but also the city (which are not mutually exclusive), will transfer from the FNSB Assembly to the Fairbanks City Council. Ultimately, the decision-making process for this case saw a lot of back and forth between citizens/citizen groups, the DCP, PC, Assembly, and City Council. Sometimes, this decision-making arena can be confusing to citizens due to their lack of experience with the framework, a weakness in local government structure. As Figure 4 shows, at times the planning process can become even more confusing as this transition of decision-making power diverts from the typically anticipated process.

In this case, the Fairbanks City Council had the final decision-making power and their decision was not perceived to be valid, as the city is almost never involved in FNSB planning matters. Planners of the DCP disagreed with the city's decision and did not believe that those individuals vying for FOCUS Homeschool submitted an application that should be denied. The duration of the data collection process to support the DCP's and, ultimately the FNSB's, decision took several months and planners were found by the FNSB attorney(s) to be valid in their decision. This confusing process occurred solely because of the functional imbalances that exist for second-class boroughs (Morehouse & Fischer, 1971).

The limitations on planning authority challenge is comprised of a variety of requirements of planners/policy-makers particular duties, the powers available to a second-class borough in Alaska, and the impact that carrying out the requirements of policy-makers can have on their relationship with citizens. The following challenge continues to identify why citizens/citizen

groups and decision-makers need the best communicative efforts possible, in order to remain involved, engaged, and interested in the local land-use planning efforts of the DCP.

3. Skepticism of the FNSB

Planners and other employees of the FNSB are familiar with the skepticism that circles the workings of the borough system in Alaska, as it was implemented later than Alaska's statehood (Morehouse & Fischer, 1971). Moorehouse and Fischer provide a synopsis to the implementation and dysfunction of the borough system in Alaska and shed light as to why both opposers and supporters of the borough system are still skeptical:

> Instead of being the focus of a unified and adaptable local governmental system, however, the borough has occasioned persistent political conflict, and its governmental role has for the most part been minor. There was, in the first place, widespread local opposition to the creation of boroughs during the initial years after statehood. They would bring new and unwanted governmental controls and taxes to rural areas lying outside of any local jurisdiction, areas that were already receiving basic educational, road maintenance, and police protection services directly from the state. The boroughs, moreover, would overlap existing cities, and were therefore viewed as threats to city autonomy and as competitors for funds, functions, and territory. There was a similar problem with the existing school districts, where school boards and school administrative organizations resisted borough controls over their local public education programs.
>
> In view of such lack of enthusiasm for a new local structure, the state legislature in 1963 forced the incorporation of boroughs after empowering 7 them to perform only very limited local functions, by far the most important being education. The immediate purpose of bringing the local governmental system into legal conformance with the constitution was served, but the political costs of this action, and of the events that led to it, were high. Borough officials have had to struggle with city and school officials for control of even the few functions that were assigned to them by law, as well as for control of additional functions they have assumed piecemeal. In doing so, borough officials have often been looked upon as instigators of conflict who are attempting to take functions away from city and school organizations that preceded them on the local scene. It has also appeared that they are seeking to extend their services, controls, and powers of taxation to rural areas where many residents continue to oppose them. At the same time, there are others, who, wanting increased borough powers and higher levels of service from them, see borough government in its present form as much too weak and limited. Thus, the borough is faulted at the same time for being too

"Save yourself time and money. Get a permit first!"

Leslea Nunley, a long-time Fairbanks resident, began her permitting process for a small, indoor marijuana cultivation facility in February 2016, soon after the "How To Get Your Commercial Marijuana Facility Permit" workshops were held. She experienced the growing pains the planning department was going through first-hand, and while "they appeared to want [her] to succeed," she became unfortunately seasoned with the lack of communication that can sometimes creep its way into the workplace.

Nunley's property was approved for a small, marijuana cultivation facility zoning permit by CP and was then legally prepared to apply for a license with the state. Shortly after submitting her application, she was told that the Borough had not granted her full approval of her zoning permit, "even though [her] understanding was once [she] received a permit [she] was approved." Nunley noted a large poster greeting residents at the Office of the Community Planning Department, "Save yourself time and money. Get a permit first!" This inspired her to be on top of her tasks, and get her zoning permit before doing anything. Yet after applying with the State, she was told she had to go back a step.

Apparently, any marijuana *cultivation* facility required a public hearing and approval of the FNSB Assembly, even though she was appropriately zoned for the facility. The conversation that informed her of such was "the first [she] had heard" of this requirement. Unfortunately, Nunley was scheduled to appear before the Alcohol and Marijuana Control Office in Anchorage on the same day as the Assembly hearing in Fairbanks.

Within a week of learning this, prior to the Assembly meeting at which a decision would officially be made on her permit, she was contacted by Director Christine Nelson, and was told her permit **had been revoked**. Due to a different interpretation of Title 18, Nunley was suddenly required to redraw the floorpan for her facility to additional operations, which were not originally requested. She reapplied for a new zoning permit immediately, and received it (pending Borough Assembly approval) "just before leaving for Anchorage." On the same night that she was in Anchorage, having a business partner stand in for her in Fairbanks, her zoning permit passed through the Assembly, and her business' operations were officially approved by the FNSB.

The changes that Nunley had to make to her floor plan cost her another $500, as she had to change it on the State application as well. The differing interpretations of the code by the borough attorney versus the staff in planning made this process difficult. Then, during the first week of October 2016, 8 months after she originally filed for a zoning permit, she was contacted *again* with a message stating that she had "not met all the requirements of [her] permit and it may be revoked." Nunley needed a floodplain permit. This information had not been communicated to her by anyone who had reviewed her application. In her narrative, Nunley mentioned several times that she had received approval from multiple staff members in the department, and was "surprised to learn that [the floodplain specialist] works in the same office and yet she wasn't part of the original process." In documenting her experiences, Nunley has described a process that could have been remedied, had staff *communicated* with each other.

Text Box 2 - An excerpt identifying how ongoing challenges within the department can impact citizens and their perception of the legitimacy of the DCP.

> much government and too little government. Neither supporters nor opponents are satisfied (pp. 7-8).

In Fairbanks, uncertainty arises from citizens of the community who are both involved and uninvolved in the the local politics. In observation of these skeptical citizens during each respective case study, it became apparent that skeptics of the DCP have likely experienced some pattern, or have had an abrasive encounter with a policy-maker, or perhaps policy, that perpetuated their doubt in the FNSB and contributed to the formation of their general distrusting views of the DCP, the department tasked with the responsibility of planning for and managing the land within the borough boundaries. For example, the story in Text Box 2 accurately represents a dissolving relationship between a member of the community and the DCP. The mistakes made by policy-makers in the story in Text Box 2 were fortunately remedied in time, but caused a patron stress and worry, cost her money, and gave her reason to lose faith in the DCP staff. Text Box 2 also relates to the limitations of the cultural envelope of planning, its complex decision-making web (Bolan, 1969), and the borough's current governing form (Morehouse & Fischer, 1971). Planners generally understand that citizens do not grasp the complex decision-making structure of the DCP the way that staff at the FNSB might. Thereby, policy-makers' ineffective communication of the steps in the decision-making process (Figure 4) might give citizens the reason to further doubt the DCP's ability and credibility to care for their community. As noted by Bolan (1969), the planning culture is intense and can influence the attitude of the community, especially if citizens are unfamiliar with the complex processes discussed in the previous subsection.

When citizens perceive planners to be lacking credibility or certainty, they develop a greater reason to feel untrusting or skeptical. Hanchey (1983) cited Hovland et al. (1953) who

suggested two factors in the planning atmosphere that affect citizens' tendencies to accept conclusions from communicators: (1) the extent to which a communicator is perceived to be a source of valid assertions (or expertness) and (2) the degree of confidence in the communicator's trustworthiness. Creighton et al.(1983) clarified Hovland's (1953) notion by stating that in the absence of confidence and trust from citizens, communication between the agency and the public is likely to break down. Here, Creighton et al. (1983) mean that a planning agency should strive to gain the public's confidence and trust in its procedures by using engagement and transparency, rather than, for example, the state legislature's forced incorporation of the borough system in 1963 (Morehouse & Fischer, 1971). Any DCP, borough or not, should strive to be perceived by the public as legitimate in its planning process, which cannot happen if the public does not trust it. If citizens do not perceive the DCP to be authentic and credible in its policy-making and engagement strategies, then they will eventually begin to doubt the policy-makers' role in the planning process altogether. During the case studies, citizens regularly questioned the implementation of their input in policy-making. The researcher of this opus hypothesizes that often during the case studies, when doubts crept in amongst citizens, they were sensing that their recommendations were not being considered, and as a result of this perception felt as if they were altogether uninvolved in the planning process for their communities.

As documented by Creighton (1991), poor communication from agency to citizen enhances the chance of error and misinformation, which is likely to reinforce the citizen's lack of confidence and trust in an agency. A lack of trust in a planning department can lead to multi-year, or as seen in the Rethinking Smith Ranch and the JLUS case studies, multi-decade struggles in land use or irrelevant protests during valuable time, like the moments described during the FNSB

Assembly meetings. As it has been proven to be important to the participation process of planning, the DCP must strive to develop and maintain its image as the most reliable source of information about the issues it addresses (J. L. Creighton, 1991 pp. 21-28) by using sound communication.

Skepticism, whether it be of the FNSB, the DCP, or government in general, was experienced during all three case studies, as various parties were communicating (Table 3). Figure 1 provides a reference for the communication occurring during the case studies, while Table 3 describes those who make up the policy-makers, decision-makers, or citizens/citizen groups of each case study. Section V. elaborates on the importance of cultivating a skepticism-free environment for effective community planning strategies and communication to occur. During the case studies, whether it was citizens who were communicating to policy-makers or vice-versa, the policy-makers communicating to the decision-makers or vice-versa, or citizens/ citizen groups communicating to the decision-makers or vice-versa, the prevalence of skepticism could not be ignored. The impression this existence of skepticism made on the planning process inspired the investigation of several recommended outreach measures discussed in the next section.

During the case studies, policy-makers were often met with skepticism when they made efforts to communicate with citizens, thereby impeding their ability to communicate with citizens effectively. When citizens were communicating to policy-makers, their lack of confidence and faith in the DCP was recognized to inhibit their advanced education or understanding of the efforts that the DCP makes to foster responsible land use strategies; maintain the community's vision relating to growth and development; and protect the health, safety, and welfare of

Fairbanks' citizens. To clarify how skepticism impacts these communicative pathways, before citing examples from the case studies, imagine a ball hitting a wall of rubber bands. The rubber band wall represents the skepticism citizens feel of the FNSB DCP. The rubber band wall illustrates their perception of the agency being untrustworthy, illegitimate, or not the most credible for the job. The ball is the attempted communication by either party. On either side of the wall, a ball is thrown by the communicator, but it rebounds right back to them because of the disbelief and distrust that the rubber band wall holds, or synonymously, the skepticism. This example of the rubber band wall and ball will be referenced again in this section.

During the FNSB Marijuana Zoning case study, skepticism was recognized when policy-makers and citizens, or policy-makers and decision-makers, were communicating in both directions (Figure 1). Policy-makers initially struggled to find the best way to articulate the complicated potential land use regulations for legalized cannabis to a citizen/citizen group population that was untrusting of their ability to design said regulations for the community. The legalization of marijuana in Alaska proposed a challenge for all governing entities, as no previous regulations for recreational cannabis existed. From the perspective of the public, the FNSB and the DCP lacked knowledge and experience in designing and implementing rules for cannabis businesses. The credibility of the policy-makers in position to develop the land use regulations was in question by the citizens/citizen groups. Citizens/citizen groups also questioned the timing of the FNSB Marijuana Zoning process. This process from the planners' perspective was rapid and left room for flexibility in the resulting policy, whereas many citizens felt that implementable regulations should have existed, and been implemented, immediately upon the affirmation to legalize cannabis from the community on Election Day. The citizens saw the DCP

as being unprepared, thereby seeming under-qualified to take on the task of regulating commercial marijuana establishments.

The citizens/citizen groups were initially frustrated during the FNSB Marijuana Zoning case study, which impacted their general inspiration to get involved with the DCP during the drafting stages. It was not until the "How To Get Your Marijuana Facility Permit" workshops, after the FNSB code had been amended to accommodate marijuana facilities in February 2016, that citizens truly began to trust the DCP with the task of regulating cannabis businesses and properties. The citizens/citizen groups demonstrated skepticism at the working group meetings and other regulation drafting meetings during the FNSB Marijuana Zoning case study. At one of the mayor's working groups during the preliminary stages of drafting regulations for cannabis businesses, an attendee, in speaking for the collective of citizens they represented, mentioned that their opinions on the potential regulations did not matter because the policy-makers were going to do what they wanted, rather than implementing citizen comment into their policy-making. The citizens' fear that the policy-makers would not take their opinions into consideration made it difficult for both the policy-makers and citizens/citizen groups involved in the case study to give and receive feedback, as this distrusting attitude created a rebound effect on the discussion materials at hand, like the ball hitting the rubber band wall.

When the policy-makers were finally prepared to begin presenting and redesigning the regulations with the decision-makers (i.e., PC and Assembly), the skepticism of the policy-makers' ability to plan for their community persisted as some members on both the PC and Assembly did not support the entry of recreational cannabis into the community. Sometimes, a member on the PC or Assembly will be an outright non-supporter or skeptic of an initiative,

which can create a tense decision-making environment. The policy-makers' initiative, morale, and confidence in the information they are presenting can quickly diminish in a scenario where they know they are advocating to a decision-maker who staunchly opposes it. In turn, a perceived lack of confidence can be very conspicuous to citizens, especially those who are already skeptical. As both Hanchey (1983) and Crieghton (1991) theorized, an agency that does not have the faith and trust of a community or citizen group does not have the support it needs to be successful in its strategy.

In Rethinking Smith Ranch, as seen in Figure 2, the policy-makers and citizens encountered the rubber band wall of skepticism, as did the policy-makers and decision-makers in their communication with each other. The citizens repetitively made it clear to the policy-makers involved in the case study that they were unhappy with how the borough historically handled Smith Ranch's zoning challenges and did not view the DCP as the agency to solve said development challenges now. During the door-to-door outreach campaign when policy-makers tried to gain a deeper understanding of what the neighborhood residents envisioned for their properties, the planners were met by lack of faith from the citizens. Doors went unanswered or were shut in the planners' presence, enhancing the roadblock to communication between the parties. Likely attributable to the general distrust they felt as a result of the previous attempted rezone, the citizens of Smith Ranch struggled to convey their desires to the policy-makers at the meetings held for them. From the time of the first attempted rezone, some citizens had resorted to the use of spot-zoning to remedy their parcel development challenges in Smith Ranch. Spot zoning is the rezone of one parcel among many. Prior to the Rethinking Smith Ranch case study, federal laws changed as a result of the housing market crash in 2008 and spot zoning became

illegal. Some residents of Smith Ranch had trouble understanding why they could not simply rezone their parcel like some of their neighbors had, as the policy-makers explained that the neighborhood as a whole would have to rezone (except for the spot-zoned parcels). Many citizens felt like the individual property owner should have the ability to change or not change his/her parcel's zone. The challenge of the limitations on planning authority presented itself during this time, as well, because citizens of Smith Ranch struggled to comprehend the complexity of the zoning code and framework that the DCP works within. Land use rules exist for a reason, and the citizens were worried about losing their current uses to a new zone and a potentially new set of rules. At one moment during the door-to-door campaigns, a resident of Smith Ranch said that she felt like there was something the FNSB was not telling the neighborhood. This citizen's skepticism prevented her from realizing potentially remedial and beneficial alternatives that the policy-makers were presenting and, instead, persisted the poor communication between the parties.

When the policy-makers were communicating to the decision-makers about the vision for Rethinking Smith Ranch, they presented their strategy to combat the historic skepticism of the neighborhood and how the proposed solutions for neighborhood emerged. The policy-makers informed decision-makers of how the citizens felt about previous efforts to rezone their neighborhoods, as well as the skeptic citizens' viewpoints on finding the current potential resolutions. The policy-makers found it necessary to discuss the skepticism they met early in the outreach process to further describe the success of the implemented outreach measures during their presentation to the Assembly. Noting the citizens' doubtfulness did not negatively impact the Assembly's willingness to approve the policy-makers' solution, as had been expected. Policy-

makers thought that the Assembly might be apprehensive to approve their offered solution out of fear of further upsetting the citizens of Smith Ranch. Yet, the policy-makers' account of the Rethinking Smith Ranch process wound up contributing to the Assembly approval of a solution for the neighborhood. The overwhelming support from both the Smith Ranch citizens who attended the public hearing and the decision-makers made policy-makers aware that the current residents of Smith Ranch held a small, yielding amount of trust in the DCP. Overall, when the policy-makers were communicating with the decision-makers, the planners ensured that the decision-makers were privy to knowing that the public might not trust what they had to offer. The overall skepticism of the DCP's ability to help strengthened the power of the citizens' lacking confidence in the policy-makers. The citizens' lack of faith in the capabilities of the DCP did not considerably impact the Assembly's approval of a remedy to the neighborhood's challenges. Yet, the Smith Ranch residents' distrust of the FNSB and DCP was a proponent to the decision-makers' understanding of the case, and the example this scenario provides strengthens the concept of the skepticism that envelopes the responsibilities of the DCP.

In the JLUS MNO case study, it was observed that the policy-makers, decision-makers and citizens/citizen groups experienced the rubber band wall of skepticism while communicating with each other. Citizens' skepticism of the DCP was also apparent and created communicative hurdles during the implementation of the JLUS MNO. Citizens whose properties would be marked with the MNO to denote potential military noise activity were asked by letter to attend the community meetings for question and answer sessions held by the DCP before introducing the overlay to the FNSB PC. During these gatherings, the few citizens who attended seemed to

distrust the planners involved in the project. The implementation of the noise overlay seemed arbitrary to many of the meeting attendees.

A notable time gap existed between early community engagement efforts and the actual drafting and implementation of the noise overlay, which made re-engaging citizens difficult and diminished the planners' credibility. Frequently, the citizens who were engaged during the implementation of the MNO asked why the overlay was just being implemented when the military had already been present in the FNSB for decades. To citizens, it seemed like the implementation of an MNO might have been beneficial upon the implementation of the second-class borough, the FNSBC Title 18, or during the last review of the comprehensive plan. The interval between engagement efforts and the implementation events was distinctly confusing to citizens. The policy-makers, and a 'technical expert' who was flown in from Maine to describe the details of how the military determined the contours defining the overlay, made the data behind the potential overlay seem more complicated to citizens, rather than simpler. The jargon used by the policy-makers and the technical expert flustered both citizens and PC members. As a result, the decision-makers resorted back to their information packets rather than relying on the policy-makers as an accredited source of information. The information packets for both the PC and the Assembly contained findings of fact that supported the policy-makers' recommended decisions and proposals. The confusion that amassed during these meetings disrupted the decision-making process as it diminished the public's confidence both in their policy-makers and decision-makers.

Two other communicative pathways must to be discussed related to this challenge. The skepticism policy-makers tend to meet when decision-makers question them impacts the positive

image and validity of the DCP. When citizens support or oppose ordinances or other measures through their testimony to the decision-makers, the decision-makers sense skepticism too. All of the mistrust in the atmosphere impacts the decision-making environment, and was observed to detract from the opportunity to make good decisions for land use planning. When policymakers present a proposal to the PC or Assembly, part of the process requires these decision-makers to unpack and question the information that they provide. The questioning that tends to occur during this phase in the decision-making process typically cultivates an atmosphere of doubtfulness amidst decision-makers, who are of the highest rank in the decision-making process. This doubtfulness reduces the discernible legitimacy of the policy-makers' ability to develop reasonable decisions and solutions for the community, and it stems from a board of citizens who are there to uphold the mission of the borough while also incorporate the concerns of the community in their decisions. While the decision-making model of requiring boards and commissions to find the checks and balances in the DCP's efforts can be useful and enlightening to policy-makers and citizens/citizen groups, the requirement for decision-makers of a higher rank to question those presenting the information, on which they base their decision, does not strengthen the credibility of the presenters, or in this case, policy-makers. This decision-making model instead devalues the findings of fact that policy-makers offer and perpetuates an image of unqualified professionals creating the rules for the community, akin to a limitation on the planning authority of the FNSB.

The decision-makers of the FNSB PC and Assembly also experienced the citizens' skepticism during times of public testimony. During the case studies, many citizens articulated their distrust in the decision-makers with oppositional testimony. Figure 1 shows that the

decision-makers did not meet the challenge of skepticism when communicating to the citizens during the Rethinking Smith Ranch case study. Unfortunately, as was observed during the entire participant observation study, the skepticism of the DCP did not solely exist within the examples of the case studies and is a challenge that persists today (Thomas et al., 2016). This skepticism, which at times translates as a general dislike for government, is explored further in the next subsection.

Citizens' skepticism of their government leaders might be a measurable challenge that can eventually be overcome. Sanoff (2000) advocated for policy-makers to remain focused in promoting a sense of community. If policy-makers do so, and the citizens' trust and confidence in their policy-makers is improved, stronger citizen participation is achieved and therefore, success in building trust and confidence is recognizable (Sanoff, 2000). The greatest outcome to communicating with citizens when trust is fostered is, for one, the creation and implementation of land-use regulations that are important to citizens. When governing measures both resonate with citizens and reflect their input, there is a higher success rate of implementation. Otherwise individuals and groups resist solutions and plans which are imposed on them (J. Creighton et al., 1983, pp. 21-28), much like what occurred when the boroughs were imposed on the state (Morehouse & Fischer, 1971).

B. Challenges Not Directly Linked to the Case Studies

The challenges of this section relate primarily to the DCP and other policy-makers of the planning sphere within the Fairbanks area. They could otherwise be deemed "challenges not directly linked to the case studies." Figure 1 and Table 3 work together for this section to guide

the reader with a graphical representation of who is communicating with whom in the moments of challenges. These challenges are represented by the group of green circles labeled A-D in Figure 1. The applicable scenarios in this section, which occurred during the time of the overall participant observation study, were general or regular in their occurrence, and were found to be a typical part of policy-making at the local land-use level for the FNSB.

1. Technology Saturated Field

The FNSB, like all jurisdictions, is federally required to reach out to citizens through varying means about topics concerning their properties, their community, and legislative matters. During the participant observation study, it became apparent that several of the outreach methods utilized by the DCP to satisfy this requirement do not generally employ the internet, or technology-driven platforms. However, current planning literature is focusing more and more on digital engagement strategies and using the internet as a way by which to increase the amount of citizen participation in projects. The FNSB DCP, unfortunately, faces a challenge unique to an interior Alaskan community of the 21st century. Technology-based planning strategies can be challenging to implement in Fairbanks, Alaska, as citizens do not use or depend on the internet (i.e., television streaming, video conferencing, app use) here like citizens do in other urban, United States regions. One key attribute to why internet is used differently in Fairbanks relates to the availability, and speed of available internet, in the community. The internet access needed to implement new digital engagement strategies is only just becoming a reality for Fairbanks residents. On average, K-12 schools in Alaska have 246 kbps of internet connectivity for each student and staff". For perspective, that is 754 kbps below the Federal Communications Commission 1,000 kbps benchmark for in-school Wi-Fi (Nix, 2015).

In addition, the cost of broadband internet is not attainable for many citizens of the Fairbanks community, as the cost of living in Fairbanks, internet not included, ranks highest nationally in the West (FNSB Community Research Quarterly, 2018). In many areas of Fairbanks, if a household desires internet, the companies have to run cable from a connection point, out to a structure on the homeowner's land, which is an investment that, for many, is not worth it or attainable. With current planning literature increasingly encouraging digital engagement, policy-makers in the FNSB are struggling to effectively and creatively engage citizens in their community which is behind the times in terms of technological advancement. The recommended strategies in planning are more frequently suggesting the use of websites, apps, and virtual engagement environments. Unfortunately, while technology lags in Fairbanks, the community is synonymous with the rest of the world in terms of data delivery, and the citizens, like citizens in so many other areas worldwide, want their data and information fast. Stronger engagement strategies emerging from more metropolitan planning departments in cities like San Francisco, Chicago, and New Orleans are influencing the rest of the nation in what the most effective ways to grasp citizen attention are. The DCP is competing with these modernized engagement strategies, and is doing its best to be as current as possible, even though the researcher observed that citizens in the FNSB might not even be ready for their modified, watered-down strategies.

Siu and Goodchild (2011) discussed the challenges of becoming too reliant on technology in citizen engagement strategies, reminding planners that a full leap into technology-driven policy-making is not the answer for every citizen/citizen group:

> How can we reach people without access to mobile phones, computers, and the internet? Considering the fact that not all Internet users are necessarily social media users, how can we disseminate relevant information to people who have not adopted online social-networking services? In addition, online social networks are only a small fraction of the total set of real social networks; how can we collect data on social networks that are not represented in the digital world? (p. 9).

Therefore, when it comes to implementing technology-based surveying, and engagement strategies as challenges arise, citizen engagement drops. As seen in Figure 1, when citizens and policy-makers communicate with each other, and when policy-makers communicate with each other, this challenge becomes known.

Since the 1990s, the role of technology in planning has been evaluated (Craig, 1998). Craig found that numerous authors looked into the relationship between computer technology and social issues in order to determine whether technology aids or diminishes local government efforts, and specifically land-use planning (1998). He found that the internet can support the community participation process and, ultimately, the decision-making environment. Integrating the internet and internet-based outreach into daily, routine municipal practices, as recommended in current planning schema, is a root cause of challenges for the FNSB. The internet's role in the DCP has changed dramatically over the years, and during the participant observation study, the entire borough website was amended to provide easier information access to all citizens. The new, user-friendly website has increased the transparency of the borough as a whole, but does not particularly engage or educate citizens during their online experience. So many communities that are commended for their success in engaging citizens via the internet have done so by creating virtual environments for citizens to learn in. Citizens in communities like these have the option to learn about their community, their community's budget, the goals of their planning department, and more, all through a web-based interface.

Simultaneous digital engagement and education are the focus of several new planning strategies seen throughout literature, during webinars, and in *Planning Magazine*, a monthly publication of the American Planning Association. Sanoff (2000) discussed the purpose of participation and the expectations policy-makers should have for their citizens concerning the opportunity to learn through the process:

> An important point in the participatory process is individual learning through increased awareness of a problem. In order to maximize learning, the process should be clear, communicable, and open. It should encourage dialogue, debate, and collaboration. Thus, participation may be seen as direct public involvement in decision-making processes whereby people share in social decisions that determine the quality and direction of their lives. This requires the provision of effective communication media in order to provide suitable opportunities for users to participate in the design process. There are many benefits accruing from such an approach for the community, the users, and design and planning professionals (p. 10)

As a result of these sentiments, planners throughout the world are finding new ways to reach and communicate with citizens in the planning process, in an effort to foster learning opportunities for them. Communities throughout the contiguous United States have designed virtual environments for online use that aim to provide engaging and playful opportunities that educate users on the decisions, constraints, goals, and practices of their governing municipality. While investigating these different engagement software for the DCP, the researcher examined several products, such as Bang the Table, CrowdGauge, Granicus, Mind-Mixer and Metro-Quest. Some of these products are designed as games, while others are just more user-friendly and interactive than the standard surveying model (i.e., multiple choice, yes or no). Each of these programs requires the use of a computer or smartphone, which as mentioned, not everyone has access to in the interior community of Fairbanks, Alaska. The current FNSB website has links to a number of

documents, including files like minutes, permits, and complaint forms, but does not solicit digital, quantifiable feedback from the citizens. Nor does it allow citizens to digitally step into the roles of those who work for and manage the borough in order to understand why certain decisions are made regarding their topic(s) of interest. For example, planning-focused citizen participation software, such as Metro-Quest, Bang the Table, and Mind-Mixer, use varying digital tools to engage and educate citizens online. CrowGague offers a game that assesses a citizen's priorities in their community by allowing them to allocate a virtual budget. The user then has the opportunity to redistribute the funds if their priorities change or if they are curious about what the impact might be if they do. The game demonstrates how difficult working with a budget can be, especially one that spans such a broad range of community matters.

Other current and modern strategies for citizen engagement call for departments to retrieve data from citizens through multiple social media forms accessible by smartphone, as well as crowdsourcing apps that geolocate the user, document trail usage, or add photos of public spaces to maps. Geolocating apps, such as Strava, Foursquare, Yelp, AllTrails, and Gaia provide community planners with access to data like citizens' use or reviews of local spaces, typically linking planners and citizens (Fredericks & Foth, 2013) by opening the gate for secure communications on the planning issues that matter to citizens such as public spaces or local trails. These technology-driven engagement strategies could be invaluable to the FNSB's planning and decision-making process, but the applicability of such technologies is low due to a lack of high-speed broadband and the FNSB's persistent reliance on traditional participation methodologies.

WORKSHOP SIGN-IN SHEET (2.22.16)
HOW TO GET YOUR COMMERCIAL MARIJUANA FACILITY PERMIT

	NAME	EMAIL ADDRESS	MAY WE CONTACT YOU WITH INFO IN THE FUTURE?		HOW DID YOU HEAR ABOUT THIS WORKSHOP?			
			YES	NO	FACEBOOK	POSTER	FRIEND	OTHER (PLEASE SPECIFY)
1	John Doe	johndoe@gmail.com	✔		✔			on the radio
2								

Figure 4 - An example of the sign-in sheet for the FNSB Marijuana Zoning workshops which provided information to produce Figure 5.

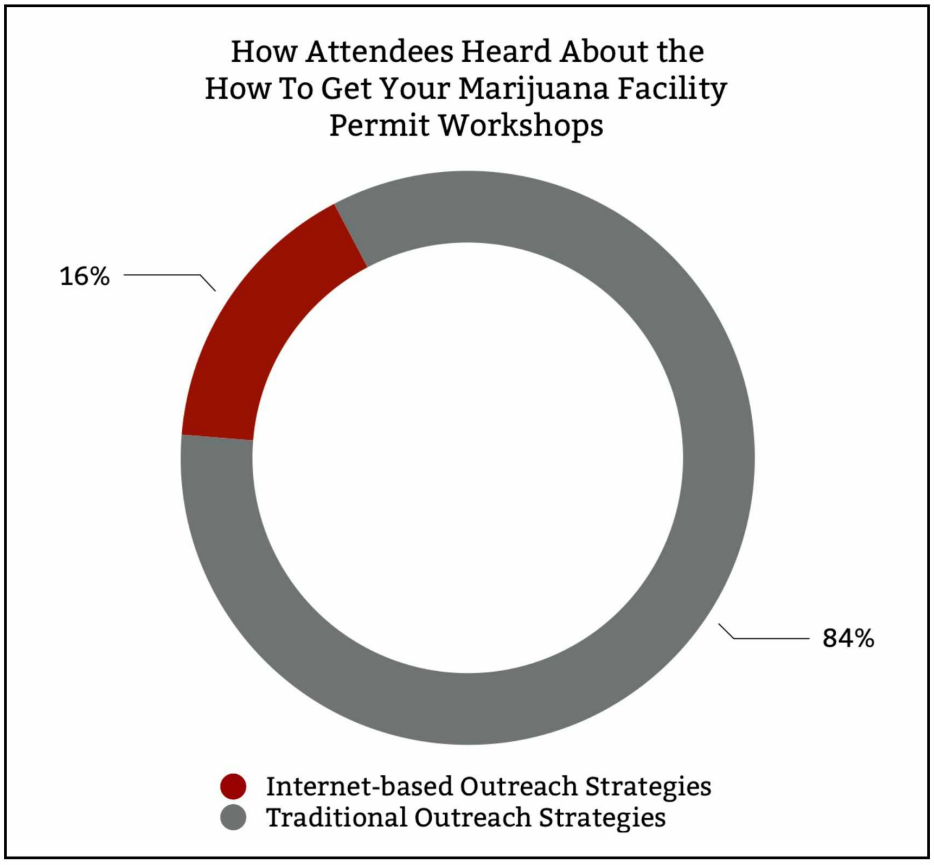

Figure 5 - This figure shows that more attendees heard about the workshops hosted by the FNSB via traditional methods than newer, internet-based methods.

Innes and Booher (2004) discussed the challenges related to traditional participation methodologies. Their following synopsis of the efficacy of such methods provides an accurate representation of what current public participation looks like at the FNSB, and inspires the need for change:

> The traditional methods of public participation in government decision-making simply do not work. They do not achieve genuine participation in planning or decisions; they do not provide significant information to public officials that make a difference to their actions; they do not satisfy members of the public that they are being heard; they do not improve the decisions that agencies and public officials make; and they don't represent a broad spectrum of the public (p. 3).

Aside from the use of crowdsourced, data-driven, smartphone technology, other tools like computer-driven mapping technology provided by Esri, such as ArcMap, ArcPro, and ArcGIS Online are valuable digital tools that utilize GIS technologies to create visually stimulating and navigable community maps. For example, several communities worldwide are creating story maps, or Esri's new way to present information so that it resonates with the viewer, to present alongside community projects. These tools, while currently utilized by the FNSB, are not being used to the degree that other communities around the world are using them. The Esri User Conference that takes place yearly offers the opportunity for users to attend seminars on the capabilities of Esri's products, and learn about the positive impacts such products have had on communities. The FNSB holds its own unique set of challenges as a community, and Esri's tools present the opportunity to connect those challenges with solutions offered by planners and citizens with crowdsourcing models, enabling greater citizen engagement. ArcMap, ArcPro, and ArcGIS Online provide mapping capabilities to the users, enabling planners to lend visual aid and interactivity to the citizen participation process. Yet, oftentimes there is confusion amongst

citizens about the data, where it came from, and how it is being interpreted. These curiosities can slow a decision-making process and obstruct a fluid and informative discussion, as seen during the JLUS Assembly meeting in November 2015.

Citizens oftentimes struggle with the online tools as well, as they are responsible for the selection and deselection of layers, which can be frustrating to a new user. To understand the engagement effectiveness of the FNSB website, as well as the newly-implemented DCP Facebook page, the researcher administered a short survey to the citizens attending the "How to Get Your Marijuana Facility Permit" workshops. The goal was to learn how they heard about the workshop (Figure 4).

The survey, as seen in Figure 4, was on the sign-in sheets placed at the workshop entry point. It prompted almost all citizens for a response. Both workshops had standing room only with approximately 150 attendees each evening (Bohman, 2016). As seen in Figure 5, traditional outreach methods like radio ads, newspaper ads, public service announcements, and word of mouth were more effective at informing citizens about the FNSB-hosted workshops. The internet-based outreach strategies like Facebook, Twitter, and Craigslist only reached a small fraction of the attendees on both nights.

Like Siu and Goodchild's (2011) notions that not all citizens benefit from technology-based planning strategies, Waddell (2011) too challenges the incorporation of new strategies into the public participation model for planning agencies. He discussed how the process of taking models developed in academic research settings, where theoretical validity and advancement of methodology have high priority, and "moving them into public agency settings in which priorities, such as reliability, ease of use, and staff capacity to explain to stakeholders what the

models are doing and why, create predictable gaps in understanding and can undermine a project" (Waddell, 2011, p. 209). Waddell's findings might explain part of the friction that the DCP experiences when it used social media platforms as outreach tools in their effort to be more transparent via the internet. With the younger generation utilizing social media as their avenue to be engaged with community happenings, the challenge of this technology-demanding field becomes a greater reality. While the traditional outreach measures are seemingly more effective in reaching citizens in the FNSB, they do not reach enough of the citizens, which in turn, urges the advancement of outreach strategies by means that couple outreach and technology. How can the DCP combat the challenge of low internet speed and usage and begin engaging the broadest spectrum of citizens possible by use of internet-based crowd scouring or surveying technology?

2. Lack of Support from Decision-makers

As seen in Table 3, the group of decision-makers for the DCP includes the FNSB PC and the Assembly. During the participant observation study, it became apparent that, at times, some of the functions of the DCP were not well understood or prioritized by these decision-makers. The DCP acts to protect the health, safety, and welfare of the borough's residents, which can be difficult to do efficiently when the department must thoroughly defend all of its decisions before acting. This particular challenge existed when all parties (Table 3) were communicating during the participant observation study (see Figure 2).

Frequently, matters related to zoning regulations are contended by the PC or Assembly, as many Alaskans inherently reject authority, especially authority over their property (Morehouse & Fischer, 1971). At times, this dislike for governance applies to citizens, the decision-making boards, which are comprised of citizen volunteers, and even employees of the FNSB. When the

DCP designs an ordinance or advances a land-use plan, their goal is to prioritize the health, safety, and welfare of the citizens. However, sometimes the financial support needed to achieve their goals does not exist due to a lack of consensus in the Assembly, as the decision-making environment of the Assembly is ineffective. The debate over responsible land use policies recommended by the DCP quickly loses focus due to a tendency for decision-makers to be overly skeptical of policy recommendations.

Policy-makers present their reports to the decision-makers, attempting to communicate their professional knowledge on the subject matter. Sometimes, planning jargon can confuse and annoy decision-makers, impeding their ability to understand professional opinions. This translates into a lack of trust and support. The seat holders of the Assembly during the participant observation study tended to resist planning efforts because, as is the common sentiment among citizens visiting the DCP, "this is Alaska and each person's land is each person's land!"

Decision-makers struggle to understand the importance of the policy-makers findings on pressing land use issues. Part of the problem is the historically relaxed enforcement of land use regulations in the FNSB. Before 2016, citizens could not even anonymously file a code enforcement complaint, as it was unnerving for many citizens to file a complaint against, say, their neighbor. Even if they did, the Assembly would most likely not spend money to address it. As such, for several years, the DCP did not receive many complaints because policy-makers could not guarantee anonymity, and it was unnerving for many citizens to file a complaint against, say, their neighbor, particularly if they felt their safety was in danger. In the past, citizens needed "standing" in order to file a complaint with the DCP about a non-conforming land use,

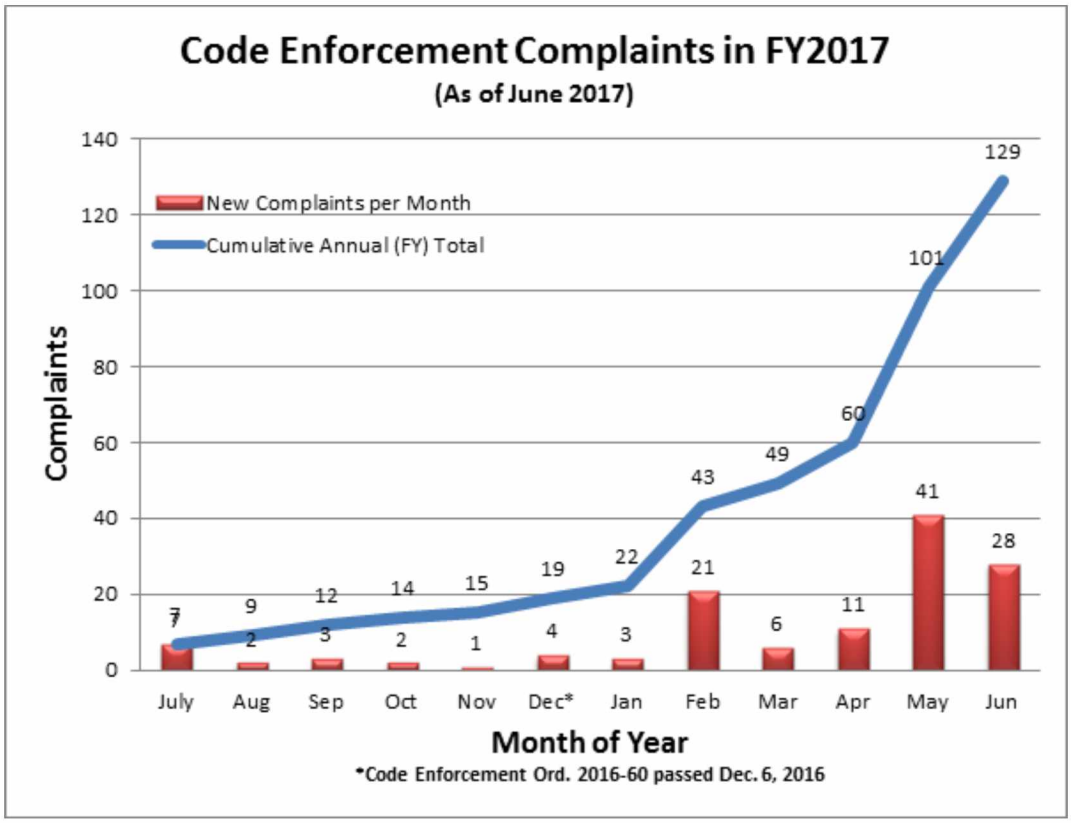

Figure 6 - A chart illustrating the rapid increase of complaints against properties in violation of FNSBC Title 18. The steady policy-driven lack of support from decision-makers prior to the passing of Ord. 2016-60 directly impacted the number of complaints that were received once citizens were granted anonymity and did not need "standing" to file a complaint. This increase in complaints also solicited more financial support from the Assembly, which was becoming increasingly difficult to harness.

meaning that unless the complainant lived on an adjacent property, or their health, safety and welfare was "directly impacted," their say was not valid.

Ordinance 2016-60 was passed in late 2016 to remedy these two issues, supposedly reinvigorating the code enforcement potential of the DCP. While Ordinance 2016-60 provides a benefit to the citizens of the borough, the DCP and Assembly are still navigating the budgetary constraints involved with addressing the hundreds of complaints the code enforcement officer has received since Ordinance 2016-60 was approved (see Figure 7). One of the largest code enforcement issues in the FNSB is the presence of unlicensed and unscreened junkyards, typically full of old, broken-down automobiles. Though citizens can take vehicles to the landfill

themselves for free, vehicles are often abandoned at "transfer sites" costing the borough taxpayers roughly $500 to remove (Bohman, 2018). This is not a problem of laziness, but rather of people not knowing the information. If citizens knew how much they are costing the FNSB, through an educational outreach plan, code compliance would likely go up (Bohman, 2018).

Furthermore, the zoning map of the FNSB is a mess. In some parts of the borough, zones that are not compatible might be found adjacent to one another. It is not uncommon for a residentially zoned parcel or group of parcels, to be established amidst parcels with zoning that accommodates conflicting uses. An exemplary area of the borough where this disorder in zoning is problematic is the downtown core, which greatly impacted a portion of the decision-making process for the FNSB Marijuana Zoning case study. This challenge impacts the decision-makers and policy-makers because at times, decision-makers find it difficult to accommodate or appeal to the citizens facing messy zoning. The messy zoning of the FNSB is attributable to blurred zoning regulations, relaxed enforcement of FNSBC Title 18, and spot zoning. Spot zoning is now illegal. But, as explained in the Rethinking Smith Ranch case study, it once offered residents the chance to rezone their parcel to fit their development needs, even if the parcels surrounding their own were zoned something completely different.

Oftentimes, decision-makers become so confused by the challenges of zoning that it is difficult for them to recognize the recommendations of policy-makers as responsible. During the FNSB Marijuana Zoning case study, a significant portion of work sessions, working groups, and PC and Assembly meetings was spent discussing the zoning of the areas of large interest to cannabis entrepreneurs, as well as those with uses conflicting with cannabis establishments (i.e., schools, churches, sobriety centers). This hindered the ability of the code amendments to

progress, and created nervousness and anxiety amongst all communicator (Table 3). The example relating to the FNSB Marijuana Zoning process is just one of several. The impact that the FNSB's messy zoning repeatedly had on the decision-making process throughout the participant observation study showed the recognizable theme of policy-makers lacking support from the decision-makers. Zoning challenges remain unaddressed because the decision-makers become unwilling to wade through such confusion.

These challenges have been caused and compounded by a lack of the decision-makers' focus or support on land use policies. With these issues in sight, policy-makers do their best to navigate the decision-making environment for their applicants (i.e., citizens). Sometimes the decision-makers' conclusion is dissatisfying to a citizen, or detrimental to their development plans, and these conclusions might shut off communication between citizens and the borough that would otherwise be productive. Ultimately, an unenforced code equals unhappy citizens who are maddened and disgruntled by the unattended responsibilities of the FNSB. As a result, the reputation of policy-makers for the DCP worsens.

Sometimes the PC's or Assembly's decisions can halt the communication process and cause the citizens to have little to no trust in the decision-makers. As noted, a lack of trust will transpire as increased negative perceptions of the borough and the DCP, impeding effective communication with citizens/citizen groups. Several times throughout the participant observation study, a hesitation amongst policy-makers to propose an ordinance or amendment was recognized. Often, policy-makers would hesitate to make recommendations out of fear of what the Assembly might say. If policy-makers anticipated the Assembly to contend or oppose an idea they might propose, they would hesitate to put time and energy into the work it takes to get the

policy to the Assembly. While the government provides a system that invokes checks and balances, when a decision-making body's reputation for being unsupportive literally halts a proposed ordinance before it ever leaves the department that is proposing it, the essence of democracy is forgone and good policy and practice is potentially at stake. All of these elements can create significant distrust in the planning division, which was noted throughout the case studies and is an important aspect of the next section.

3. Alaskans' General Dislike for the Government

This section addresses a challenge that is so persistent, and is viewed as a characteristic trait of many Alaskans, and that challenge is the Alaskan resident's inherent nature to either strongly dislike government or oppose its existence altogether (Thomas et al., 2016). The challenge of Alaskan's general dislike for the government, as seen in Figure 1, was present during the case studies primarily when citizens communicated with policy-makers, when decision-makers communicated with policy-makers, when decision-makers communicated with citizens, and when policy-makers communicated with each other.

Alaska gained statehood in January 1959 and the FNSB was implemented as part of a statewide shift to borough systems in 1964. Both dynamic shifts in government operations were significant to Alaskan residents. The implementation of the borough system was so strongly opposed that the state leaders at the time, "forced the incorporation of boroughs after empowering 7 them to perform only very limited local functions" (Morehouse & Fischer, 1971, p. 8). Unfortunately for the fulfillment of the FNSB's mission as a second-class borough, the Alaskan people harbor unfriendliness and opposition toward government (i.e., local, state, or

federal) and its rules and regulations (Thomas et al., 2016). When citizens were observed communicating to the policy-makers or decision-makers, their disposition often signaled negativity and frustration with rules. During the participant observation study, this enmity of borough government was often recognized in conversations between the DCP and citizens.

The irony regarding Alaskans' general dislike for the government, is that few states are more dependent on the government at the federal, state, and local levels than Alaska (Thomas et al., 2016). Over time, the feeling of being isolated and different, attributable to surviving harsh conditions (i.e., non-diversified economy, arctic climate, lack of available health care) of the state coupled with the high cost of living, has molded Alaskan culture (Thomas et al., 2016). With their rugged, individualistic values and ideals, instilled by existing in such a trying environment, Alaskans oppose government involvement on some issues like land-use, taxes, or possession of firearms. But their dependency on government funding exists for other issues like health care, education, and combating homelessness within a community. Therefore, Alaskans possess a polarized mentality on what the government can, and should do, to support their existence, which in turn creates conflict between citizens and the FNSB and DCP. Widespread belief is held that the government does not have an obligation to aid Alaskans in overcoming the challenges of being a state. Instead, according to Morehouse and Fischer (1971) and Thomas et al. (2016) Alaskan's choose to exist in the challenges the land presents like the climate, resources, or terrain. From the perspective of many citizens, the challenges of their environment here have little to do with the government. This conflicting relationship that Alaskans have with the government impedes good citizen engagement with the FNSB and, ultimately, impacts the way some decision-making occurs. For example, if citizens were more involved and engaged in

the land use planning process of the FNSB, they might be less reluctant to policy-makers' recommendations for land-use. Sometimes, citizens will attend a PC or Assembly meeting to testify, often wondering aloud why they were not involved in the preliminary stages of the policy-making. The answer, as observed during the participant observation study, is that they are not engaged or personally invested in the responsibilities of the FNSB, but rather abhor its involvement in regulating land use.

Citizens who dislike the FNSB because it is a government agency tend to be untrusting of the policy-makers in the DCP and do not think that land use planning is necessary for their ownership of land. These attitudes and opinions between potential land developers, business owners, and homeowners and policy-makers tend to halt communication as soon as it begins. Outreach efforts on the part of the DCP become moot and engagement decreases. The unfortunate aspect to this diminished engagement is that, if citizens were better engaged and let go of their aversion for the borough, they would realize how much power they have regarding local level policy-making and planning.

During the participant observation study, an example of citizen organization and participation occurred that was inspiring for many citizens and DCP employees to see. The following example could guide concerned citizens in their effort to amend parts of the FNSBC that are disagreeable or daunting to many in the borough. To provide an example, a shooting range was erected in a neighborhood. This shooting range was fully permitted according to the General Use-1 zoning designation on the parcel, and the business owners did not need to file for a conditional use permit. But, this parcel was situated in a neighborhood, and the residents of the neighborhood were outraged. Ultimately, the shooting range was shut down after the

neighborhood's displeased citizens organized and contested the use of the land for a shooting range. One citizens said, "The shooting range opened without any public notice," which was true. The code at that time permitted the shooting range outright, and no public notice was required. Eventually, the citizens who contested the shooting range wound up changing legislation, and the FNSB DCP amended the code to change the requirements and process for erecting a shooting range within borough boundaries.

This challenge of Alaskans' general dislike for the government also arises when decision-makers and policy-makers are at the decision-making arena, such as a PC or Assembly meeting. Public testimony influences the discussion between the policy-makers and decision-makers, which could inevitably alter the climate of the dialogue among the citizens in the room as well. Also, it is fairly common for citizens who are antipathetic of government's role in Alaska to serve on the PC or Assembly, as these decision-making bodies are comprised of volunteering or elected citizens. Now and then, there will be a PC or Assembly member who advocates for the most relaxed enforcement of the FNSB code or land use regulations, thereby not supporting the efforts of the DCP. During the participant observation study, the researcher frequently noticed that policy-makers would avoid bringing recommendations to the PC or Assembly due to this antipathy. The next major section discusses potential ways to address this conflicting relationship between citizens and the FNSB agency.

4. Limited Resources/Understaffed Department

When resources such as staff, funding, time, or software in land use planning are limited, another common challenge identified throughout the referenced material presents itself. Göçmen and Ventura (2010) and Siu and Goodchild (2011) evaluated new methods in public participation

and engagement, and found that ineffective public participation models for planning departments stem from challenges related to the need for more resources like money, staff, technology, and support.

During the participant observation study, the case studies were observed to consume a significant amount of the planners' weekly time. Generally, each planner was working daily on something related to one of the projects. Individuals who were not involved in whichever case study at the time were receiving the work that those involved in the case study could not tend to due to their heavy workloads. This scattered distribution of responsibility created a hole in the department, as some planners had to take on multiple roles while others were unavailable or overloaded with work. This caused stress to compile in the DCP. Outside of the case studies, this strain on the planners and their process continues to exist, even though staff work tirelessly to ensure that they are attending to all of the reports, permits, and customers possible. This environment creates negative scenarios for others who seek services from the DCP and issues like those experienced by a citizen, shown in Text Box 2.

New code enforcement measures (Bohman, 2017) have also added to the workload of the department (Figure 6). While Bryan Sehmel, the current code enforcement officer of the FNSB, addresses complaints and violations as quickly as they are submitted, he remains in a constant state of playing catch-up. Budget constraints inhibit the DCP's ability to hire more planners and code enforcement staff. Ultimately, because of the DCP's inability to hire more staff, the productivity of the department has been impacted.

However, as the challenge of this section is two-fold, were funds available to hire planners to stratify the workload of the current planners and policy-makers, the department

would still experience challenges in the recruitment/hiring process for an open position. Seventy-seven Accredited Planning Programs exist in the United States, none of which are in Alaska (Planning Accreditation Board, 2016). It is tough for the DCP to hire qualified candidates for positions within their department, as more times than not, they are required to spend funds to implement out-of-state recruitment strategies, as there are not many accredited planners residing locally. For example, a position for transportation planner had been open for over six months and re-evaluation of the description for the position was necessary in order for the department to reopen the search after it closed without a hire the first time. The challenge of procuring staff who are knowledgeable about Alaska, its environment, and planning challenges of the interior, stifles the productivity of most planning departments in the state (AK APA Conference Notes, 2015). In addition, due to the harsh environmental conditions of the interior, at times, retaining new, out-of-state hires can be difficult for the DCP.

When policy-makers communicate with decision-makers, this challenge again makes itself present. Decision-makers might not fully understand the prioritization of specific projects, amendments, or permits, which contributes to confusion in the decision-making arena. The lack of financial and staff resources can impact the execution of certain planning tasks which plays to citizens' anger and can disrupt a positive communication process. The possibility of addressing more community issues and concerns might exist if the DCP were able to process permits or requests at the rate they receive them. For citizens to develop their property, they typically must file for a permit, to ensure their structure or use is compliant with zoning code in their area or on their parcel. Granting permission to build is one of the responsibilities fo the DCP. Frequently, planners must set aside one project, perhaps one that is important to the future of the FNSB like

the legislation of cannabis, or a potential outreach plan, to address another and advance a citizen's request. The excessive addition and shuffling of tasks to the already abundant amount of work the planners have at the DCP creates a tense and stressful environment. When citizens witness or experience the challenges of an understaffed and under-resourced department, they lose motivation to seek council or permits before developing their properties, and the code compliance and zoning challenges continue to grow rather than be corrected by the efforts of the DCP (Text Box 2). Eventually, the DCP's credibility and ability to gain citizen engagement may be permanently lost as a result of this pattern for good. The next major section focuses on recommendations that could alleviate the heavy workloads with which the short-staffed department copes.

C. How These Challenges Relate to Communication

This section aims to address how the aforementioned challenges relate to communication. The complex decision webs, tight timelines, and other weaknesses in the structure of local government (Elwood, 2002), considered in this opus as the limitations on planning authority (Bolan, 1969) were recognized at the FNSB to detract from the credibility of the policy-makers. Stemming from these limitations, and the challenges in communication they present is the mistrust in the credibility of the policymakers. Then mistrust only perpetuates the existing general antipathy Alaskans hold toward government (Thomas et al., 2016). Communication is stimulated through citizen participation (Sanoff, 2000) and if a lack of involvement exists in the decision-making process, then a communication pathway may shut down. The Rethinking Smith Ranch case study provided an example of a communicative pathway shutting down as a result of

policy-makers historically not involving citizens (Spillman, 2016). In 1978, residents were uninvolved in the process of an attempt to rezone their neighborhood. They wound up feeling uninformed and aggravated and as a result fought an appropriate solution to their property development challenges. Stronger communication theoretically betters the articulation of a framework that citizens do not necessarily understand (Bolan, 1969). Bolan (1969) noted that planners, in this case policy-makers, who have a high social acceptance in their communities and generally identify with the community's dominant norms and values have greater success in community action programs. This notion encourages a wider range of communication for any planning department, as it could potentially engage a greater number of citizens and facilitate discussion.

Hanchey's (1983) philosophy on ensuring the legitimacy of a planning agency through transparent, effective, and expert communication also speaks to how the above challenges apply to communication, as many of the challenges were noted to invalidate the policy-makers for the DCP. Hanchey (1983) noted that "poor communication enhances the possibility of error and misinformation, which is likely to reinforce a lack of confidence and trust in the agency" (p. 23). Strong communication is important for overcoming the challenge of a negative public perception, as well as ensuring that citizens are filing for permits at the appropriate time and understanding the timelines and framework within which the planners work.

The technology-related challenges found in the literature (Sui & Goodchild, 2011), and through observation of the case studies and the DCP, relate directly to the policy-makers' communication of borough matters and gaining (or not gaining) citizen/citizen group input on such matters. Göçmen and Ventura (2010) described how community partners, like the cities of

Fairbanks and North Pole, as well as community partners like the University of Alaska Fairbanks (UAF) (which is nestled in the heart of the FNSB), should be coordinating with each other during the significant growth period and incorporation of GIS, mapping tools, and other technologies into the planning schema. And while GIS is increasingly becoming a part of the FNSB and the way the FNSB services its citizens with online maps and other data visualization tools, citizens were recognized at times as being reluctant in trusting the data used to create the maps. Citizens do not know what data is protected, public or private, and thereby without being provided with insight to how the data is obtained by the borough, their skepticism of the DCP and other FNSB constituents persists. Another important consideration in defining how the challenges of this opus relate to communication as described by Sui and Goodchild (2011), who pondered the ability to communicate with non-internet users in an internet/social media driven outreach and data-capture culture. Other challenges listed by Day (1997) involve the potential complications that can arise from participation. While communication with citizens/citizen groups is sought after, there are times where citizen involvement dominates or disrupts the planning process, and distracts from the accomplishment of an effective outreach process.

The challenges identified in this opus also link to communication in the sense that scholars are not sharing information or theories with one another and the literature is untidy as Day (1997) found, there exists a considerable confusion amongst scholars about what good citizen participation actually looks like in practice. The DCP has identified what good citizen engagement is in the FNSB, but has difficulty incorporating the more modern planning literature into its practices for the reasons mentioned by Waddell (2011). The staff has difficulty effectively expressing relevant or expert information to stakeholders (e.g., citizens, citizen groups, working

groups, decision-makers). At times, when the literature, webinars, conferences, or other learning tools for planners and policy-makers in local organizations do not ease the communication process, the foundation upon which a participation theory was built can crumble. If this occurs, policy-makers are left in a poor light and the citizens frustrated with their local government.

V. The Importance of Communication in the Role of Community Planning

This section addresses the importance of fostering strong communication between all parties (Table 3) in the context of land use planning for the Alaskan community. Land use planning requires the input of citizens and seeks their design in creating healthy environments (Aboelata et al., 2011). Planning cannot succeed without some participation, but the ability of the masses to contribute positively and constructively to planning efforts can be challenging in some communities (Day, 1997). Through the utilization of engagement methods, such as data visualization via GIS (Sui & Goodchild, 2011), or by looking deeper into what types of participation policy-makers desire for which projects (Sanoff, 2000), the potential to effectively communicate with citizens, policy-makers, and decision-makers becomes apparent. Sanoff (2000) noted the importance of cultivating a planning process that involves people of the community. Involving citizens in the community decisions will result in an increase of trust and confidence in the organization (Sanoff, 2000). Sanoff (2000) defined participation as the exchange of information, conflict resolution, and determination of something to supplement planning and design. Participation reduces the feeling of invisibility amidst citizens and communicates to them a degree of concern for their involvement in policy-making. In turn, the

process by which information is obtained and expressed should ultimately improve the decision that stakeholders make through the participation of the citizens (Innes & Booher, 2004). At the FNSB, the DCP seeks the input of citizens, fellow staff, and decision-makers, realizing the importance of communication, whether it be verbal, visual, written, or digital. This section focuses on discussing the value of communication with the community, with the decision-makers, and within the workplace. For this section, it is important for the reader to reference Figure 1 and Table 3, provided in Section III of this opus.

A. Communication Between Policy-makers and Citizens/Citizen Groups

Good communication is valuable to the planning process. As it has gone for decades and is seen throughout the referenced literature, policy-makers are striving to develop and innovate means by which to engage the public, encourage discussion, and facilitate effective communication. Citizens need good communication with policy-makers in order to capitalize on the opportunities available to them to provide input in policy-making and community development. Yet, this good communication can be difficult to stimulate, because of the challenges like those faced by policy-makers, decision-makers, and citizens/citizen groups (Figure 1, Table 3). It was observed during policy-driven decision-making processes for the DCP that involving the public can impact communication in different ways, either positively or negatively. A positive citizen participation process can result in the effective articulation of information, research, and potential decisions that the policy-makers might make. It can motivate a discussion that illuminates present challenges and solutions. Historically, in Alaska, transparency has been lacking in public policy (Thomas et al., 2016) and has, as such, created

mistrust and discouraged citizens' engagement. Describing challenge 3 (Figure 1) of this opus showed the skepticism of the FNSB that policy-makers experience through the scope of the case studies. The positive aspects to engaging citizens require transparency and trust, and without those elements, citizens' interest in local-level government happenings might be minimal. Sanoff (2000) noted that a planning task should be made as transparent as possible as without transparency citizens do not feel directly involved and the success of the process to implement policies is not as great. As Thomas and colleagues (2016) noted, a lack of transparency can lead to a weaker government position and even to less aggressive investment in the decisions at hand. In fact, a negative citizen participation process can reduce momentum between communicators, pause a decision-making process, and cause unnecessary strain on implementing strong policy.

As represented by the blue circles in Figure 1, during all three of the case studies, when policy-makers were communicating to citizens/citizen groups (Table 3), all three of the challenges occurred. The challenges include 1) involving the public; 2) the existing limitations on planning authority and; 3) experiencing the skepticism of the FNSB. When citizens were communicating to policy-makers, the second and third identified challenges were observed to impact the effective communication of planning goals, as citizens did not understand the limitations the DCP works within and were skeptics of the borough's abilities (Figure 1).
As represented by the group of challenges not directly linked to the case studies shown in green circles in Figure 1, when policy-makers were communicating to citizens/citizen groups, challenges A, B, and D were observed. The full set of challenges in this group include A) working in a technology saturated field; B) lacking support from decision-makers; C) Alaskans' general dislike for the government, and; D) struggling with limited resources and an understaffed

department. When the citizens/citizen groups were communicating to the policy-makers, challenges A, B, and C were recognized.

During the Rethinking Smith Ranch case study, when policy-makers were communicating to citizens/citizen groups, it was clear to policy-makers that the traditional, less-transparent method of public involvement, sometimes perceived of as inefficient, unfair, and unproductive (Bulmer, 2001), would not work for the collective of citizens in the Smith Ranch neighborhood. Unlike what occurred with the first attempted rezone in 1978, citizen participation should provide planners with more information earlier in the process (Day, 1997) and should not just occur at the time that the ordinance is drafted and introduced to the decision-makers. Unfortunately, involvement methodologies still exist at the FNSB that do not involve citizens prior to a PC or Assembly meeting. In fact, these low involvement standards might mean that the only communication citizens receive once an ordinance is drafted is a letter that simultaneously notifies them of a public hearing and offers them the opportunity to testify. Sometimes, citizens will only receive these letters if the decision will directly impact their property. This scenario is not ideal for the citizens, as was cited throughout the referenced material, and the case studies provided an opportunity to prove it.

Rather than applying this traditional, non-engaging, yet legally acceptable methodology to solving the land use challenges of Smith Ranch, Spillman supported strong involvement of the citizens in the rethinking of Smith Ranch's zoning and development challenges. By including citizens in the process, policy-makers were able to ensure that the residents understood the challenges of, and potential solutions for, their neighborhood. As described in the introduction of Rethinking Smith Ranch, the intense need to engage citizens in determining a remedy for Smith

Ranch encouraged this strong communicative process. The residents of the area realized the opportunities the DCP was providing them and participated in the planning process from the beginning to the end. As such, no oppositional testimony existed from community members during the final decision-making stages and the FNSB Assembly unanimously voted in favor of the neighborhood-wide rezone.

A similar, engagement-heavy need urged a preparation process that included citizens in the ordinance development process within the FNSB Marijuana Zoning case study. After months of working group meetings, which included representatives from schools, pro- and anti-marijuana groups, churches, and law enforcement sectors, all from the FNSB and its community partners, the DCP hosted two educational workshops to elucidate the amendments to FNSBC Title 18, to allow land uses related to marijuana businesses. During the FNSB Marijuana Zoning process, citizen opinions were not just sought after, but the engagement was strong and citizens influenced the policies and decisions of the case study. The borough was praised for the involvement opportunities it created during the FNSB Marijuana Zoning process, as well as the successful engagement of citizens/citizen groups of both the pro- and anti-cannabis (AK APA Conference Notes, 2016) communities.

In both the FNSB Marijuana Zoning and Rethinking Smith Ranch instances, the preexisting challenge of citizens' skepticism of the FNSB and the DCP (i.e., challenge 3) motivated the policy-makers to be prepared before reaching out to the community, in turn fostering effective communication. The positive experiences policy-makers and citizens had as a result of preparedness for outreach demonstrate that involving and communicating with citizens is vital to land use planning. Unlike the two other case studies, a different challenge stood out

during the JLUS. Challenge 1 of involving the public and the stress it can put on policy-makers' and citizens' communication, as seen in Figure 1, was present at times during each of the case studies. The following example involving the JLUS case study provides the best explanation for how involving the public can sometimes go awry.

The protest and citizen outrage over matters unrelated to the JLUS that citizens, policy-makers, and decision-makers encountered during a critical phase of the MNO implementation process does not speak positively to engaging citizens. Instead, this experience highlights Day's (1997) skepticism of the ability of the masses to constructively and positively contribute to planning efforts at times. The process to implement the JLUS MNO and the effort to cultivate practical outcomes demonstrated the value of not only informing citizens of a decision that might impact them, but engaging them in the process leading up to the decision. This experience is further described in the following paragraphs.

The DCP introduced the ordinance to implement the MNO to the PC in November 2015. This overlay was to exist in the form of a flag on property details to denote that a parcel could be subject to military noise activity exceeding comfortable decibel levels. Real estate professionals, appraisers, and bankers (Bohman, 2015) all testified that the noise overlay would not change anything regarding property value and noted that any noise mentioned in the presentation was considered as pre-existing. This overlay was just a way to let current and future property owners know that they might be subject to noise exposure.

After considerable deliberation over technical information that was not pertinent to the actual decision-making process at the PC meeting, the MNO ordinance progressed to the Assembly. However, during the public testimony period of the Assembly meeting, an extraneous

incident occurred. A group of anti-war/anti-military protestors showed up with intent to stop the military from encroaching on the citizens of the borough and used Assembly members' valuable time to address the MNO. The citizens brought a boom box to the Assembly chambers and played "Don't Kill" by Hamell on Trial, an anti-war song, over a portable stereo and danced around the Assembly chambers in protest (Bohman, 2015). As Assemblyman John Davies noted for those attending the meeting, the MNO was about the disclosure of military noise to existing and potential renters and buyers near the military bases. Bohman (2015) reported that Assemblyman Davies said, "It's not a referendum on whether we want the military or not," and "That's really not what we are debating here tonight." It is likely that the citizens in protest did not fully understand that the overlay, which was approved after their demonstration with a vote of 7-1, was advisory only and had no regulations attached to it, meaning it did not call for enforcement measures. It occurred to the policy-makers involved in the project that perhaps these opposing citizens did not fully understand the presented information due to a lack of engagement efforts or a lack of participation in existing opportunities. While disruptive to the decision-making process, this experience with the anti-war citizen group motivated the DCP to criticize its outreach efforts and consider the communicability, or lack thereof, of such efforts.

At this time during the Assembly meeting, the less common, negative side of public involvement became apparent to the researcher of this opus. Bleiker (1981) stated that not all forms of public participation are constructive. The "Citizen Participation Handbook for Public Officials" (Bleiker, 1981) provides a long list of principles that demonstrate trends in the phenomenon that is citizen participation. One of the challenges with these principles relates

directly to the experience that the policy-makers and decision-makers gained from the protestors at the advisory noise overlay hearing.

> CP [citizen participation] PRINCIPLE NO. 54:
>
> Although a lot of public projects — and even private projects — cannot be implemented unless the relevant public *is* involved in their planning, *not any and all forms of involvement can make a constructive contribution*...
>
> An inappropriate form of [citizen participation], or an appropriate form at the wrong time, can do harm. All forms of [citizen participation] cost time and effort to both the agency and to the public. An inappropriate form of [citizen participation] used at the wrong time cannot contribute anything to the project and, yet, it uses up everyone's time and effort. This kind of [citizen participation] is resented not only by project staff, the public resents it just as much.

Instances like this example from the JLUS case study are typically anticipated by those coordinating outreach for controversial planning issues and are avoidable through better engagement efforts. Had the intent behind this non-regulatory, informative municipal action been better understood by the protestors, or had the anti-war demonstrators been more engaged and understanding of the presented information that evening, the Assembly would have had time to focus on other agenda items following the JLUS MNO. Assemblymembers spent a significant amount of time and energy defending the military's presence. As a result, the citizens' protest led to a derailing of the appropriate use of the decision-makers' time, and good communication became disrupted.

The examples from the FNSB Marijuana Zoning and Rethinking Smith Ranch case studies feature challenge 1 (Figure 1) of involving the public and getting citizens/citizen groups excited about the policy and decision-making component to land use planning. The citizen involvement and participation example from the JLUS case study demonstrates the challenge of

the wrong form of public participation presenting itself. Public participation is recommended, sought after, and acknowledged to be productive to land use planning, and citizen participation like that observed in the FNSB Marijuana Zoning and Rethinking Smith Ranch case studies is the type that planners seek. Citizen involvement and participation like that observed with the protest in the JLUS case study can derail a process and cause unnecessary friction to the communicative pathways between policy-makers and citizens.

Challenge 2, which encompasses the existing limitations on planning authority, was encountered in all three case studies when the policy-makers and the citizens/citizen groups were communicating, or trying to communicate, with each other. In order to best describe the elements contributing to challenge 2, it is important to relate the challenge to how it complicated communication in the case studies. During the FNSB Marijuana Zoning and Rethinking Smith Ranch case studies, the policy-makers experienced difficulties determining appropriate zoning due to complicated and sometimes nonsensical pre-existing zoning of the land.

Determining an appropriate zoning solution for Smith Ranch proved complex for policy-makers at first. The first attempt to collectively rezone the entire neighborhood before more serious development problems arose occurred at the Assembly meeting from 1978, and the citizens did not support the decision. In the years between then and the more recent neighborhood-wide rezone effort, some citizens who desired to develop their properties rezoned their individual parcels, an option historically known as spot zoning, which is now illegal. These spot zones created complications in determining an appropriate zone for the whole neighborhood. Zones are designed to designate specific kinds of land, and particular uses which are compatible with that land, and therefore not all zones are compatible. The existing spot zones

in the neighborhood might not have been fully compatible with the options available to the majority of the land in Smith Ranch, and therefore the planning authority was limited in its options to present to the public. Citizens who attended the neighborhood workshops became curious about the spot zones and some attendees inquired about the possibility of using them to rezone their properties in the future.

In explaining the legalities and limitations to the residents, some individuals became frustrated that spot zones were ever allowed in the first place, and the mood shifted for many residents in attendance at the workshops. Briefly, the limitations of solutions available to the planners and the residents interrupted a fluid communicative process, and resurrected negative feelings about the past and the challenges the neighborhood had experienced over the years. Eventually with the help of the citizens of Smith Ranch, planners were able to modify the scope of the rezone to alleviate the challenge of the pre-existing spot zones. The process moved forward as a result.

The policy-makers in the FNSB Marijuana Zoning case study experienced a similar lapse in communicative flow when policy-makers were developing and articulating the zoning regulations for cannabis businesses. When using the zoning identifier tool on the FNSB website, one can decipher the constraints that the policy-makers had to work within when amending FNSBC Title 18, especially regarding zoning for marijuana businesses. This tool shows a map of the borough, and on that map, the myriad of zones (sometimes non-compatible zones) within an area chosen by the user. For the FNSB, several potential zones for allowing cannabis were adjacent to zones considered to be non-compatible (i.e., State regulations require all marijuana businesses to be specific distances from sensitive uses or particular zones that exist for uses non-

compatible with marijuana businesses. Statewide, these regulations minimized the breadth of the locations from which entrepreneurs could select for their businesses). With the FNSB's pre-existing zoning troubles, widely attributable to the General Use zoning designation that hardly limits the uses of land (i.e., meaning schools, liquor stores, daycares, and other uses conflicting with cannabis businesses are permitted virtually anywhere), planners were limited in what regulation they could accomplish.

The FNSB Marijuana Zoning policy-makers had to consider every corner of the borough, of which roughly 97% is zoned for General Use, for potential cannabis activity and articulate what types of businesses were allowed where. Policy-makers knew citizens would likely feel confused by the incorporation of state regulations and FNSB zoning limitations, and anticipated difficulty in the explanation of how the regulations were to work together. The difficulty in articulating complicated, seemingly conflictive, yet permissive zoning regulations might have caused greater challenge in keeping citizens engaged or compliant with zoning measures. Anti-marijuana citizen groups feared the encroachment of marijuana business, while pro-marijuana advocates worried about a lack of available and compliant real estate.

Policy-makers sought help from the GIS Technicians of the FNSB Computer Services Department to develop a visualization tool that could help them communicate the complicated amendments to FNSBC Title 18. Ultimately, the communication process continued, the amendments to FNSBC Title 18 passed, and two valuable workshops armed with visualization tactics to show citizens the confusing zoning measures were held for anyone interested. In sum, the existing limitations of zoning and the question of compatible land use options for cannabis businesses initially hindered policy-makers' drafting process and communicative effectiveness.

By determining and initiating solutions within these limitations, the policy-makers were able to witness the impact of valuing the importance of communication with involved citizens.

Limitations on planning authority existed in the JLUS case study, but they related more to the strict timeline within which the DCP was required to work. The meeting calendars of both the PC and Assembly can at times be unaccommodating to planners, especially when an ordinance depends on collaboration with community partners. Segments of the JLUS MNO and MHO processes did not advance as quickly or efficiently as they could have due to limitations such as missed deadlines, difficulty in communicating with community partners and other policy-makers, and the decision-makers' timeline constraints (i.e., meeting dates and pre-meeting deadlines).

Outside of the case studies, the challenges represented by the green circles in Figure 1 were all observed at one time or another during the participant observation study. When policy-makers were communicating to citizens/citizen groups, challenges A, B, and D impacted information exchange. Challenges A, B, and C were present when citizens/citizen groups were communicating to policy-makers. While also relevant to explaining the importance of communication between policy-makers and citizens, Section V. elaborated on the general impact these challenges had on planning efforts, and also provided a variety of examples.

This section provided examples of how the ebbs and flows of communication between the policy-makers and citizens/citizen groups of the FNSB impacted the effectiveness of the efforts in each case study. All of the examples demonstrated how critical both the lack of and persistence of communication between policy-makers and citizens/citizen groups is to the planning process. Through the heightened citizen engagement observed during the case studies,

against the strong odds of the usual low levels of engagement, came potential solutions. The measures taken to include citizens in the case study planning processes should become more customary for the DCP, and recommended solutions to implementing more measures like them will also be discussed in the subsequent.

B. Communication Between Policy-makers and Decision-makers

This section highlights the importance of communication between FNSB policy-makers and decision-makers. As seen in Table 3, the decision-maker group of this opus is made up of the FNSB PC and Assembly. Effective communication between these parties is essential to the community planning process. If policy-makers do not provide clear and interpretable information to decision-makers, then valuable time might be wasted during PC or Assembly meetings in an effort to sort through complex information, ultimately resulting in the postponement of a decision that might be crucial to current planning or land-use related efforts. A distracted or confused decision-making body might also make a judgment that is not the best for the future of the community. Confusion among decision-makers, directed at the policy-makers who are presenting the information at hand, might lead to a community's misunderstanding of an ordinance's purpose. This may cause controversy over the efforts of the policy-makers and potentially eradicate the efforts that went into researching and designing the ordinances to help the community and its land use issues.

During the case study, challenges 2 and 3 were observed when the policy-makers were communicating to decision-makers (i.e., blue circles, Figure 1). Of the challenges not directly

linked to the case studies (i.e., green circles, Figure 1), when policy-makers were communicating to decision-makers challenges B and C were observed.

During the case studies, decision-makers were communicating to policy-makers (Table 3) at PC or Assembly meetings and typically met challenges 2 and 3. Their communication consisted of reviewing a variety of material like the policy-makers' outreach efforts, technical information founding the presented ordinances, and the consideration of public testimony. Many examples of policy-makers' presentations to the decision-makers were discussed in section IV. A, providing examples to convey the importance of communication for policy-makers and citizens. At times, when decision-makers were communicating to policy-makers, the researcher noticed they struggled to communicate effectively. The underlying aspects to each challenge that impacted their communication were discussed in the challenges section. Challenges B and C, of those not directly linked to the case studies, were observed to impact communication between decision-makers and policy-makers.

During the case studies, when policy-makers were communicating to decision-makers, they faced challenges 2 and 3 (Figure 1). The limitations on the planning authority were expressed during the FNSB Marijuana Zoning case study during the policy-makers' process of incorporating a variety of zones, opinions, concerns, and complicated state regulations, into the FNSBC Title 18 amendment, and then having to articulate all of that information to the decision-makers. It was difficult at times for the policy-makers to encourage the decision-makers to look beyond the issue of legalized cannabis and instead converse about land use. Several times, conversation amongst decision-makers shifted from discussing the policy-makers' recommended measures for implementing cannabis businesses to addressing strong pro- or anti- marijuana

opinions. By this time in the planning process, the citizens had already voted in favor of the legalization of cannabis, rules and regulations were drafted, and the decision-makers' inability to stay on track negatively impacted the timing of implementing the cannabis regulations and other agenda items needing attention. The researcher realized that the above example presented a noticeable common theme of distraction occurring at PC and Assembly meetings. Such distraction from the intended discussion and vote, limits the policy-makers in a number of ways which are further discussed in the challenges section. Similar circumstances were experienced during the Rethinking Smith Ranch and JLUS case studies, where policy-makers' witnessed decision-makers getting held up on particular aspects of their presented information, rather than discussing the whole scope of their proposals. All 3 case studies provided opportunity for the researcher to recognize limitations on the policy-makers when it comes to their communication to the decision-makers. The 3 case studies also highlighted how the volunteering or elected citizens who comprise the FNSB PC or Assembly can exhibit skepticism of the work the planners and policy-makers do to try and protect the health, safety and welfare of the community.

In the Rethinking Smith Ranch case study, the report policy-makers presented to the decision-makers, in support of their recommendation to rezone the neighborhood, was over 150 pages in length. The bulk of this presentation required simple graphics for laypersons. During the implementation of the JLUS MNO, a technical expert was flown in from Maine to explain the policy-makers' data-driven decision. In this effort to clarify the information delivered to the decision-makers, skepticism grew out of confusion in interpreting the specialist's technical jargon and, briefly, the decision-makers were finding reasons not to support the initiative. This situation made the ordinance and supporting report appear to the citizens as though information

was missing or skewed. When the decision-makers questioned the expertise of the planners, the validity of their role in serving the FNSB was doubted by the citizens. Although the expert explained the mechanical components of the noise overlay, the explanation still complicated the advancement of the ordinance by convincing the decision-makers that the overlay needed further analysis.

The policy-makers tried to cultivate greater access to the information that was a part of the other case studies. For the FNSB Marijuana Zoning and Rethinking Smith Ranch case studies, both the policy-makers and decision-makers were able to navigate through the challenges with help from the GIS division of the FNSB. As mentioned in the previous section, the interactive maps were created to help the citizens of the FNSB visualize the complex zoning requirements for the marijuana facilities. Users of the online map can type an address into the search bar of the web interface and the map pans to the location of interest. Different colors on the parcels noted allowed uses, conditional uses, and non-allowed uses and entrepreneurs can decipher whether a piece of property might be worth selecting for marijuana-related developments. The development of this data visualization tool helped citizens, commissioners, and Assembly members in the decision-making process to see where most marijuana facilities might be concentrated throughout the lifetime of the legalization of cannabis and aided in a significant effort to involve and engage the community.

Of the challenges that are not directly linked to the case studies, when policy-makers were communicating to decision-makers, challenges B and D were observed. Sometimes, Assembly members who do not support the borough-level regulation of land use are elected to the decision-making panels, and this can stir up a lack of support from the decision-makers on

land use matters. Regularly, the researcher would hear policy-makers proclaim that one decision-maker or another would not like or support parts of or whole measures they thought might benefit the community. Policy-makers were often noticed to appear feeling defeated by a lack of support from the decision-makers on initiatives and policies so common in other communities (i.e., regulating shooting ranges or urban agriculture). Challenge D, of the limited and understaffed department, presented itself in this communication between decision-makers and policy-makers. Policy-makers need funds, approved by the decision-makers, to execute the DCP's mission of protecting the health, safety, and welfare. When they cannot gain these financial resources due to a lack of support from the decision-makers, or perhaps poor communication about why they need the resources, community issues can persist.

When decision-makers were communicating to policy-makers, challenge 2 was observed during the FNSB Marijuana Zoning and JLUS case studies, and challenge 3 was again experienced across all 3 case studies (Figure 1). Challenge 2 was not experienced while decision-makers were communicating to policy-makers in the Rethinking Smith Ranch case study because the policy-makers were bringing all of the information they could to their PC and Assembly in the most presentable forms possible. Policy-makers worked to develop good data visualization with "before and after" maps, as well as images of solutions that citizens came up with on their own to navigate their development challenges, and a detailed outreach strategy that provided them with an understanding of the best decision possible for all of the citizens in the Smith Ranch area. As a result of the complicated information associated with each case study, limitations on planning authority were observed in the FNSB Marijuana and JLUS case studies. The policy-makers' inability to clarify some information, or steer the conversation of the

decision-makers impacted potential communication between the parties (Table 3). Their difficulty in expressing this information was outlined in each case study description in the introduction to this opus. In all three of the case studies, decision-makers, in communicating to policy-makers, exhibited challenge 3 (i.e., blue circles). As mentioned in the opposite communication of policy-makers to decision-makers, there are times when decision-makers are themselves skeptical of the proposals of the policy-makers, which is good for the checks and balances of a democratic structure for policy-making. Unfortunately, when it begins with the decision-makers, those who are to be representatives for citizens/citizen groups, skepticism can persist throughout the planning process, impact sound policy-making practices, and even dissolve the motivation amongst planners to try new, innovative, or proven land-use planning strategies. This skepticism from the decision-makers appeared as a lack of support, or challenge B of those not directly linked to the case studies, and also demonstrated how some Alaskans carry a general antipathy for government, even those that volunteer for government-related positions.

Mainly, it is this relationship of communication between the policy-makers and decision-makers that begs for greater finesse in articulating complicated information to better the decision-making process. By not delivering information to decision-makers in a comprehensible or digestible format, the decision-makers might come off as skeptical of the policy-makers' information, inadvertently motivating citizens to feel the same, and ultimately perpetuating the existing lack of citizen engagement and complicating citizens' understanding of local-level policy-making. This was explained in greater detail in the the challenges section. The uncertainty that decision-makers deliver with their misunderstanding of information invalidates the hard

work of policy-makers and instead makes them appear to be amateurs, rather than the experts of the presented subject matter. The rising trend of utilizing visual aids for planning efforts was observed to ease communication between the FNSB's policy-makers and decision-makers in both directions as well as between policy-makers and citizens/citizen groups. Essentially, when the policy-makers struggle to communicate the information that they have acquired to support an ordinance, a new permit, or an amendment to borough code effectively, their struggle is attributable to preexisting or surfacing challenges. Preparation to overcome the challenges seen in Figure 1 is important for policy-makers and decision-makers. The challenges can impede communication and the decision-making processes as well as shift the focus of the conversation between parties and indirectly discourage citizens further from being involved. The impact this has on the planning process is explored further in the next communicative relationship, between citizens and decision-makers.

C. Communication Between Decision-makers and Citizens/Citizen Groups

Challenges arise in the last step of a policy-making process when the PC or Assembly discusses material that is presented to support their decisions at a public hearing. At these public hearings, these parties dialectically communicate, and eventually achieve a point where Assembly members discuss the information and testimony they have received in front of the public, prior to their vote and final decision. Communication between the decision-makers and citizens exposes a capacity for opposition or support that may dominate the exchange of information in the process. The Rethinking Smith Ranch case study was a fluid, positive process by the time citizens and decision-makers began their communicative process, and therefore, the

challenges of 2 and 3 (Figure 1) were not observed at that time. Challenge 1, the challenge of involving the public, provided the basis on which the outreach process was founded for the case study. The policy-makers' engagement efforts were recognized as the reason there was no oppositional testimony from residents and the PC and Assembly approved the neighborhood-wide rezone.

When the decision-makers were communicating to citizens/citizen groups either directly or indirectly through their conversations at public hearings, the researcher observed challenges 2 and 3 during the case studies. Challenge 2, the existing limitations on planning authority, was observed throughout all 3 case studies. Challenge 3, experiencing skepticism of the FNSB, was observed in the FNSB Marijuana Zoning and JLUS case studies. Of the challenges not directly linked to the case studies (i.e., green circles, Figure 1), the researcher also observed challenges B and C.

When challenge 2 was observed during all 3 case studies in this line of communication, the decision-makers were observed as doing their best against the strict timelines that the policy-makers were working within. The decision-making web for the planning process is complex and was observed to be a limitation to policy-makers' abilities to accomplish their goals during the case studies. As observed during both the FNSB Marijuana Zoning and Rethinking Smith Ranch case studies, sometimes the reports containing information to support the policy-makers recommendations to decision-makers are lengthy. The decisions of the PC and Assembly require careful, but prompt, consideration, as decision-makers, policy-makers, and citizens are all usually working within a specified timeframe. Citizens fight against the short summer months in order to develop their properties. Policy-makers bounce between the timelines of their

community partners, differing department calendars, and the desires of their citizens. Commissioners for the PC are to keep said schedules in mind, and must also consider the upcoming Assembly meetings and the opportunities those decision-makers need to approve or deny the submitted permits, ordinances, or amendments. These constraints alter the decision-making atmosphere, and add pressure to policy-makers, decision-makers, and citizens.

Skepticism of the efforts of both policy-makers and decision-makers was recognized to impede their abilities to adequately communicate with citizens/citizen groups during both the Rethinking Smith Ranch and FNSB Marijuana Zoning case studies. Citizens also expressed doubt in the impact their participation would have on the policies, as well as doubt in the decision-makers' abilities to make sound decisions for the borough. The researcher speculates that this doubtfulness, still common among citizens, likely exists because of current, or historically, lacking efforts in transparency. As mentioned, a lack of transparency in local government contributes to the Alaskan people's general mistrust of the government, a challenge witnessed throughout the duration of the participant observation study when these parties were communicating.

When decision-makers review the recommendations of the policy-makers, citizens are welcome to comment. Sometimes, when decision-makers review the material presented to them, their unfamiliarity with the subject matter is highlighted. When citizens see this unfamiliarity from a decision-maker, in conjunction with a short testimony period that does not offer question and answer time, their skepticism of policy- and decision-makers' abilities persists. During the JLUS MNO case study, a work session was held to inform the decision-makers on the technical details of the overlay. Still, after a work session, the long-range planner's presentation, and the

explanation of how the data were manipulated into the MNO, PC and Assemblymembers remained confused and discussed the MNO for over 90 minutes (Audio Track 5, Assembly Minutes).

Of the challenges not directly linked to the case studies, challenges B and C were also observed when citizens/citizen groups were communicating to decision-makers. At times, policy-makers were observed to have difficulty gaining the decision-makers' financial support in regard to code enforcement endeavors. Citizens were unaware of this lack of support for the DCP and, when communicating with the decision-makers, citizens just wanted to understand what would or would not help their cause. Citizen's skeptical perceptions of the DCP and its efforts are impacted by this lack of decision-maker support for policy-makers.

An example of the lack of support from decision-makers on planning matters includes their avoidance of addressing land use issues. About a decade ago, a grassroots organization influenced the decision-makers to amend code enforcement measures in FNSBC Title 18. Their amendment required citizens to have "standing" or be directly impacted by the property of complaint, and disallowed anonymity. These amendments passed and essentially paused code enforcement for several years. When citizens called the DCP requesting to file a complaint, they would become disillusioned and not file a complaint. By approving the decision to not afford citizens anonymity through the DCP in their complaint process, decision-makers, inhibited their communication with citizens, an unproductive cycle. Citizens' complaints were not reaching the decision-makers, yet the decision-makers were the ones who put the policies in place to cause said scenario.

Several times throughout the duration of the participant observation study, the researcher observed that citizens either did not attend meetings where they could provide testimony to a decision or their testimony was typically followed with a statement attributable to "it doesn't matter anyway." Citizens would go into testimony fully anticipating that their testimony would not make a difference. In turn, they would express frustration with the borough's involvement in local governance. This scenario further demonstrates Alaskan's general dislike, and distrust, for government.

When citizens/citizen groups were communicating to the decision-makers during opportunities for public testimony, the researcher observed challenges 1 and 3. Challenge 1 of involving the public was observed in all 3 case studies. Challenge 3 of experiencing skepticism of the FNSB, was observed in the FNSB Marijuana Zoning and JLUS case studies. Advertising public hearings is a requirement of the FNSB. Public testimony periods give opportunity for citizens to testify for or against a measure. Unfortunately, observations of challenge 1 during the process to implement the JLUS MNO demonstrated moments where this opportunity welcomed the challenges of involving the public. It was during the public hearing at the Assembly meeting with the JLUS MNO on the agenda that a group of protesters used 30 minutes of valuable time to protest a matter that was irrelevant to the measure actually being discussed. According to Day (1997), sometimes the public testimony period directly reflects the masses' inability to contribute to policy-making.

D. Communication Among Policy-makers

While communication between policy-makers and the citizens and/or decision-makers is important and requires constant criticism and refining to benefit the planning process, good communication among policy-makers is important too. In observing the activity between the policy-makers, challenge 2, the existing limitations on the planning authority, was recognized during the FNSB Marijuana Zoning and JLUS case studies (Figure 1). Challenge 3, experiencing skepticism of the FNSB, was a prominent factor of communication between policy-makers during the Rethinking Smith Ranch case study. Of the challenges not directly linked to the case studies, all four of the identified challenges (i.e., A-D) observed during communication were recognized.

During the FNSB Marijuana Zoning case study when policy-makers were communicating with other policy-makers, limitations were observed in the form of differing interpretations of the FNSBC and the existing zoning challenges which further complicated the development of regulations for an already complex land use initiative. During the JLUS, the differing schedules of the community partners and the planners proved to be difficult in accomplishing tasks for the implementation of the MNO and MHO. Planners also struggled to articulate to the military-based community partners what kind of data they would need before presenting information to the decision-makers. These data were important to the planners for their process, but the military-based community partners did not sense the urgency, and as a result, did not deliver data as timely as the planners would have preferred. Timelines shifted for the planners, and the MNO took longer to implement than originally planned. During the Rethinking Smith Ranch case

study, challenge 3 impacted the communication between policy-makers. It was important for planners to respect the history of the neighborhood they were targeting for a rezone. In addition, the negative reaction of citizens in 1978 to the potential rezone made some planners apprehensive to do *too* much. Some policy-makers were fearful of the impact the outreach might have on some of the residents in the neighborhood. There was ultimately some conflict at the forefront of outreach strategy planning that was overcome once planners and other policy-makers began brainstorming.

For the DCP, all 4 of the challenges were recognized among planners, community partners, the borough attorneys, and other parties who comprise the policy-makers of this opus (Table 3). When watching and reading about new age engagement techniques in webinars, seminars, and conferences, the planners were recognized to be experiencing challenge A, or how technology has in some way saturated the field of planning. Planners of communities in the contiguous United States recommend asking citizens to utilize their smartphones and social media platforms to be engaged with the happenings of their governing municipality. This engagement model does not suit the FNSB, as discovered in the challenges section, for reasons related to the overall technological advancement of the borough and its community partners. Many, more modern recommended strategies for engaging or involving citizens that the researcher learned about during webinars, conferences, and in the cited materials, involved crowdsourcing. Crowdsouring typically requires some form of interaction with technology on the citizen-end (Brabham, 2009). While technology is a large part of the culture in Fairbanks, the community is not as immersed in it as other communities in the lower, contiguous 48 states. Data for smartphone usage is more expensive to access and high speed, unlimited internet is rare in

the borough. Rather, the local phone companies market different internet packages based on the user's internet needs. The call to utilize technology, or other modernized methods, in gaining citizen participation in community planning poses a challenge for the FNSB. To communicate with citizens via means that have worked in other communities is difficult, as the community is limited or lacks the resources for these popular forms of engagement. As Crieghton et al. stated, "There are limitations to the authority of the planning agency to undertake certain alternative solutions which may be desired by the public. In certain circumstances, this may lead to a disparity between the capability of the agency to satisfy community needs and the expectations of the community" (1983, p. 22). Oftentimes, when this challenge existed during the participant observation study, it was when community partners or other participating policy-makers were collaborating with planners on a project. Collaborators would often recommend the use of an app, or wonder about particular, technology-based forms of engagement strategies that have worked well in other communities. Unfortunately, their recommended methods were, and are, not so easily applicable, as discussed in the challenge section. From the perspective of community partners and consultants, who are often hired in the field of planning to help with a big process, technology should be the answer to engaging citizens. Yet, the FNSB is still evolving in its traditional citizen engagement process and is therefore not wholly applicable to the scope of citizen engagement for planning matters.

In challenge B, policymakers struggled from a lack of support from decision-makers for land use initiatives, code amendments, and code enforcement. The residents of the borough often seek help from the DCP regarding property, but for almost a decade, the DCP was legally unable to grant anonymity when the citizens wanted to file complaints about properties within the

borough (i.e., junkyards, non-conforming businesses). This issue stopped the citizens from filing complaints against known land use abuse, created a gap between the planners and the community they plan for, and encouraged some policy-makers to look away from irresponsible land use. Some policy-makers did not find it necessary to put focus into rectifying this challenge, impeding interdepartmental relations.

Of those not directly linked to the case studies, challenge B, the lack of support from decision-makers, was observed to also impact communication between policy-makers. During the participant observation study, the researcher knew of the lack of financial support from the Assembly. The researcher's perception was that their lack of support made it difficult for the DCP policy-makers of the DCP to agree on how to process some citizens' permits and complaints. Policy-makers of the FNSB DCP consistently navigate around Thomas et al.'s (2016) described general antipathy that people of Alaska feel towards the government, or challenge C, which also impacts their communication with each other, as some prefer to take the lackadaisical approach to processing a permit, while others seek to identify potentially hidden solutions.

Regarding the importance of communication, challenge D of those not directly linked to the case studies brings to light the strain that an understaffed DCP with limited resources might experience. When the case studies were underway, the planners had difficulty allocating time appropriately, therefore neglecting other planning tasks and projects. The understaffed state of the DCP made it difficult for planners to focus on outreach and engagement strategies to educate citizens on the process for getting a land use permit. The building season in Alaska is short, and for the policy-makers, the best time to process land use permits is in the winter and spring,

before the quick-to-begin and quick-to-end building season commences. As noted in the challenges section, citizens largely do not know of the strenuous process that might be required to obtain a zoning or building permit or something similar. With an understaffed DCP comes a variety of long-range deadlines, or potential zoning code amendments that get pushed aside for the more immediate deadlines. Then, planning for the future of the community becomes unimportant. The DCP becomes disorganized as policy-makers' workflow loses direction and structure, leading to broken communication, forgotten tasks, and corner-cutting. In times like these, policy-makers were, and are likely to be, unmotivated to tackle large challenges of the FNSB like those identified in this opus (i.e., outreach or zoning). The narrative provided in Text Box 2, which demonstrates one citizens' shaken confidence in the borough's credibility, ties into the communicative strain an understaffed department experiences at the borough.

To elaborate on Text Box 2, the DCP had planned on revoking Nunley's zoning permit (10 December 2016) because she had not received a floodplain permit, even though the DCP failed to inform her that she needed one. Stronger communication of logistics between the code enforcement officer and the floodplain specialist of the DCP, who work next door to each other, could have saved her time, money, and frustration. Eventually, the situation was corrected and, while the back-and-forth cost Nunley a significant amount of frustration, stress, and added expense, she was still grateful for the help she received in fixing the issue caused by the DCP's lack of interdepartmental communication.

The earlier permit revocation that Nunley experienced was the result of broken communication traceable to differences in how the FNSB code was interpreted. Again, this example of policy-makers not communicating with each other, and the impact it can have on the

public/citizens, illustrates why effective communication within the workplace deserves higher prioritization. The staff in the DCP work tirelessly to grant permits in compliance with every word of the FNSBC Title 18. During the process Nunley experienced, the borough attorney used a different interpretation from the DCP's of marijuana business boundaries, leading to no initial success in communication with a citizen and a greater workload for the DCP (Text Box 2). During the time that Nunley was working on her permits, the borough attorney's analysis of FNSBC Title 18 changed the interpretation and its application to Nunley's permit, causing planners to have to quickly alter some of their supporting evidence for the approval of the permit. This lack of preliminary communication between the DCP's policy-makers and the borough attorney affected Nunley's experience with the department. This situation drives home the point that the DCP should, in theory, strive to work better both within their department and with other departments.

VI. Solutions to Overcoming Challenges

Each of the case studies in this opus demonstrates effective ways by which to improve communication between the DCP and community. The historically effective methods of hosting working group meetings and mailing out surveys is a good way to keep community partners and citizens engaged and involved in any planning process. Yet, as the internet continues to expand in the interior, and fewer citizens are checking the local paper for community happenings, new methods and options (Innes & Booher, 2004) such as crowdsourcing, or being physically present in times of desired input from citizens (i.e., setting up a booth at the local fair) for outreach are worth exploring by the DCP and FNSB in general. For example, developing a strong partnership

with the community's existing university could be beneficial to both the borough and the school (Feld, 1998). Voter turnout and community engagement would likely increase, and the borough could make use of existing and future research from the UAF, while also utilizing community tools made available by the university.

An immersive, digital, and data visualizing tool is one of the many community tools housed at UAF, and could help the DCP in regard to urban planning (El Araby, 2002), further the reach and power of the borough's existing GIS capabilities (Elwood, 2002), as well as provide an environment where decisions are made on neutral ground and each participant has the opportunity to visualize the impact of their decision. Fostering place attachment, another potential solution, aims to cultivate a community-wide approach to determining solutions for planning matters (e.g., redefining the long term goals for the downtown core of a community) among borough residents (Manzo & Perkins, 2006). Working to foster place attachment could contribute to overcoming many of the recognized challenges of this opus, as citizens would ultimately develop a sense of responsibility for their community.

Each of the following recommendations attenuate the existing communication challenges that arose during the participant observation study. Ideally, with the application of one of the recommended solutions, areas of communication and the communicative relationships defined in Figure 2 will see an improvement. Improvements might be measured by increased citizen participation, more positive feedback at PC and Assembly meetings, and a reduction in the public's negative perception of the DCP (Sanoff, 2000).

A. Legitimize the Agency's Role in Planning for the Community

As observed and defined in the previous section, some communicative challenges that the planners and citizens experience lie in the citizens' lack of understanding of the limitations that the DCP works within (J. Creighton et al., 1983). Citizens also do not have a great understanding of what a second-class borough's powers are in the state of Alaska, or what kinds of rules it can enforce. In order to remedy this challenge and restore communication between those impacted by said challenge, it is theorized that legitimizing the agency's role in planning for the Fairbanks area by providing a better understanding of the cultural envelope, or the responsbilities, timelines, and challenges, of planning (Bolan, 1969) will be effective. Bolan (1969) noted that the "community decision arena could be considered the 'culture' of planning since its rules, customs, and actors determine the fate of community proposals" (p. 301). He voted for a better understanding of the nature of this "cultural envelope," as it would contribute to determining appropriate strategies and techniques for planning and intervention. For example, a common misconception among citizens is that the borough has the power to do whatever it wants. When contentious land use planning issues go through the decision-making arena, citizens often exclaim that their testimony does not matter. Rather, those with the policy-making power will do whatever they want or whatever serves them best, without implementing the thoughts, ideas, and concerns of the public. It is this same sentiment that lowers the level of citizen engagement in the planning process before the land use initiative ever goes to the PC or Assembly. Citizens do not engage when planners need them to the most because they have historically been made to feel like their input is irrelevant to the mission of the FNSB. What is not so commonly discussed with

citizens is the classification of the FNSB, and the powers it does not have as a result of this classification in the state's governmental structure.

Morehouse and Fischer (1971) defined a second-class borough and explained how its citizens are to acquire secondary powers for their borough, should they so wish to:

> To acquire additional area wide powers, the second-class boroughs depend either on voluntary transfers from cities or favorable votes of the people. There have been several successful transfers and votes, but, for the most part, they have involved relatively minor functions. The people have not voted additional major powers to a borough unless the need for area wide action to meet urgent problems is clear and unmistakable - for example, flood control in Fairbanks, or, perhaps, sewer services in Anchorage. Nor have cities transferred powers to the borough unless the loss was not considered significant and the gains from spreading the tax base were obvious - for example, dog control, libraries, and hospitals (p. 92).

This definition shows that several powers must be voted into the code, as many powers are not automatically written in, which was recognized to be an assumption of many citizens during the participant observation study. Contrarily, many citizens within the borough think that the administration has its own law enforcement sector, or has the ability to arrest landowners for illegalities on their property as dictated by code. The DCP receives comments from citizens showing they envision filing a complaint with an office dedicated to code enforcement and illegal activity on properties. They picture an officer coming to a property and citing a warning or taking action that will cause a resolution, much as if they were to call the Alaska State Troopers. Therefore, citizens get frustrated when months go by after they file a complaint and it does not appear that the borough has taken much, if any, action. Citizens could greatly benefit from educational efforts that took the time to communicate about what it means to not only operate as a second-class borough with overlapping jurisdictions in Alaska, but also as a planning department working within the scenario of shared powers. Limitations exist and restrict

the efficacy of the DCP at times, and it is during these times that the communication can break down between the policy-makers and the public, which is why policy-makers should do whatever they can to communicate to citizens the limitations of their planning process.

The DCP struggles to plan for a community that does not fully trust its judgment, research, and educated perspectives related to strategies for responsible land use. Creighton et al. (1983) cited the importance of trust and confidence between the public and the planning agency. Therefore, it is recommended that steps be taken to legitimize the policy-makers' knowledge levels and comprehension of good planning to the public. In the absence of confidence and trust between the citizens and policy-makers, communication between the agency and the public is likely to break down. Poor communication enhances the possibility of error and misinformation, which is likely to reinforce a lack of confidence and trust in the agency. If an agency is to communicate effectively, it must strive to develop and maintain an image of itself as the most reliable source of information available on land use issues (Creighton, Priscoli, & Dunning, 1983).

By affording citizens a better understanding of the many stages, many processes, funding, and capabilities of the policy-makers for a second-class borough, the DCP would provide greater transparency in the planning process, and likely gain encouragement from the PC and FNSB Assembly for its planning schema. Positivity surrounding the borough and its actions could be resurrected to a level that would ultimately benefit the public's perception of the DCP, and open a gateway of communication that has been closed since the early days of the FNSB's implementation.

It is important to also consider how greater, consistent support and enthusiasm from the decision-makers of the FNSB might contribute to both legitimizing the perspectives of the DCP and accomplishing land-use related tasks through citizen engagement practices that could potentially promote the health, safety, and welfare of the community. Although the Assembly acts as the final decision-making body for the FNSB, the turnover of seat holders can create friction in the decision-making climate. This turnover is part of the decision-making process and helps to keep the decisions neutral. Yet, if there are Assembly members who do not support the work of the DCP, their skepticism may impact the community perspective of the DCP and, therefore disrupt the communication between the planners and citizens as if the citizens begin to lose trust for the DCP.

Between late 2016 and early 2017, the Assembly approved a few ordinances that supported the mission of the DCP. In a conversation between the researcher and code enforcement officer Bryan Sehmel, Sehmel noted that financial support from the Assembly to actively enforce FNSBC Title 18 used to be virtually non-existent. The mayor sponsored an initiative to ensure that support for FNSBC Title 18 related to code-enforcement matters would be prioritized in future land-use related initiatives. The Assembly approved the initiative with a clearer, more defined grasp on the culture of planning, the challenges the DCP faces without continued support from their assembly members, and the needs of citizens in the FNSB. The limitations to the actual authority that planners have (J. Creighton et al., 1983), even though they have a code enforcement officer (who does not possess much authority), was recognized by the mayor as well and he began the initiative to stop land use planning issues within the FNSB from being taken to the City Council, using the FOCUS Homeschool scenario as the perfect example.

The planning process is known to be confusing (Figure 4, Text Box 2), and therefore this level of support from the Assembly gave policy-makers hope that ultimately a positive image of the FNSB and DCP might be promoted by decision-makers' conversation and action, thereby legitimizing the agency's role in addressing the publics' needs, desires, and concerns related to their community (J. Creighton et al., 1983). When decision-makers support the passing of ordinances that ensure, say, the Assembly is more invested in planning matters, it strengthens the legitimacy of the FNSB. If the Assembly supports the policy-makers and, as an example, the policy-makers are capable of enforcing the code better as a result, citizens might begin to trust and eventually rely on the credibility and validity of the FNSB DCP. The next section advocates for a stronger relationship between planners for the community and a large user of the same community.

B. Strengthen the Relationships Between the FNSB and University

Alaska is home to a network of post-secondary education institutions all housed under the University of Alaska name. Fairbanks is home to UAF, a land, space, and sea grant institution. UAF is located in the middle of the FNSB, and plays a large role in the population and economic activity of the FNSB. Yet, as the researcher recognized, during and outside of the participant observation study, a connection between UAF and the local-level policy-making of the FNSB does not exist. The borough does not utilize enough of the resources made available to it by UAF, and the community of UAF does not necessarily immerse itself in the happenings of the FNSB, either.

Marcia Maker Feld (1998), the founding director of the U.S. Department of Housing and Urban Development's (HUD) Office of University Partnerships, is an advocate for strong, communicative relationships between universities and communities. Her recommendations to create a tighter link between universities and the communities around them resonate with the goals of the DCP and, therefore, are part of the solutions section to overcoming a few of the challenges recognized throughout this opus. The challenges including the scarcity of resources for the DCP (i.e., budgetary and staffing), engaging the public, and difficulty in explaining highly technical information and in turn fostering a stronger perception of legitimacy of the planning agency could each be solved by forging a closer relationship with the university. In adopting Feld's (1993) philosophy on these relationships, the following benefits could result from implementing this solution:

- Students might be inclined to vote on community matters, increasing the voter averages of the FNSB elections and contributing to local decisions;
- Students' level of connectivity to the community might increase with more concern for the happenings of the university's surroundings and environment;
- A larger population of individuals might become interested in borough happenings, such as public hearings, and their contributions to public testimony and the deliberation over FNSB matters; and
- Alternative solutions to articulating stickier data sets and more expert information to the layperson or Assembly might present themselves.

In sum, the population of concerned, engaged citizens might increase for the FNSB if it worked harder to communicate with the students of UAF. The FNSB might also benefit from the resources the university has to offer in terms of existing research, potential research (e.g., a graduate student might research, or get funding to research, a topic that the FNSB cannot afford

financially or time wise), and the technological resources available to the public on campus. The challenge of effectively articulating highly technical information directly correlates with this recommendation. By utilizing tools available via UAF, discussed in this section, the data expression challenges that planners experienced in all three case studies could evaporate. Using UAF's tools would create space during a tight timeline to discuss the ordinance or whatever decision is being made, allowing decision-makers to use valuable time more wisely and focus, rather than deliberate over the meaning of a particular word, image, or pairing of the two during policy-makers' presentations. The specific tool in mind to help remedy some of the communication challenges through bettering a relationship with UAF, is the Visualization (Vis) Space and the Vis Development (Dev).

UAF houses the Vis Space, an immersive, technologically enhanced environment that aims to ease decision-making processes and motivate discussions on issues or challenges that could otherwise be impaired by technical jargon. During the participant observation study, in an effort to determine a solution for communication challenges involving planners, citizens, and decision-makers, the mayor's office and some members of the DCP were invited to experience the decision-making power of the Vis Space, and their reactions affirmed the potential benefits Vis Space might apply to borough level decision-making. This immersive environment houses seven screens, fastened to the wall in a panoramic fashion. The screens are capable of displaying separate images or different pieces of one image, static or in motion. The high resolution display allows for life-size, or close to it, imagery of data. Though this technology is new to UAF's campus, Arizona State University (ASU) has worked since the early 2000s to bring technological solutions to decision-making via the use of their immersive decision theater. Tools, and decisions

made because of those tools, developed at ASU have now been implemented in their university community, including a visual dashboard that represents a dynamic model of the ASU budget, which has since gained the interest of local policy-makers in Arizona.

Technological tools have already proven to be beneficial for some aspects of borough tasks and for planners in general (Howard & Gaborit, 2007), but as mentioned, the FNSB faces its challenges of accessibility to technology, citizens' misunderstanding of how data are obtained and interpreted into the maps, and the general skepticism of the validity of their technologically-based information. A growing body of planning literature has focused on data visualization, and planning strategies are beginning to include the use of GIS, and all of Esri's products, as previously mentioned, for that purpose. On the FNSB's website, there are 9 different maps available to aid the public. Currently, online map created by the FNSB GIS team can aid citizens in their understanding of zoning of parcels, the history of wildfires in the area, or where they could build a marijuana facility. These are just a few examples of the available maps. Yet, these maps are not often used in the decision-making processes of the PC or Assembly, only on a case by case basis. Innes and Simpson (1993) predicted that the rise of GIS use by state and local governments would be an extraordinary opportunity for the planning field. Joerin et al. (2009) stipulated that, "by improving access to information, these technologies are seen as means of changing the flow of information and communication and, hence, a means of bringing down certain social barriers and increasing the individual and collective power of citizens" (Joerin et al., 2009, p. 3) The FNSB has done well at providing the maps to the community, but providing access to the maps is another task all in itself, because of the challenges faced by the FNSB when it comes to internet. Recently, local planners have become excited about story maps, as story

maps provide a way for communicators to express information through the simple action of scrolling along a map. Story maps are visually pleasing, and almost calming, as the maps shift with different descriptor boxes, ultimately telling the story of the information at hand. Story maps help to draw the connection between emotions surrounding a topic and the data or planning strategies involved.

The Vis Space would provide the PC and Assembly members with virtual environment technology tools that could improve citizens' access to these valuable maps and other online planning tools in a space for them to experience the data they are skeptical of, as well as improve PC and Assembly meetings efficiency. In the Vis Space, multiple slides of information, which are presentable all at once, could immerse attendees in visual imagery representative of particular ordinances, planning solutions, and/or urban development, and enable them to see the impact of their decision through a virtual model.

One exemplary application of the potential for the DCP to utilize the Vis Space relates to the data and jargon-dense regulatory MHO, which will aim to regulate the height development of buildings within the accident potential zone of aircraft that take off from EAFB and FWW military base. The jargon-dense explanation of the imaginary surface, which is what the data defining the potential MHO is called, was observed to be difficult to accurately articulate to even someone who is vaguely familiar with data like these. A GIS Specialist at the FNSB developed an informative, interactive 3D model of the MHO, which could strongly benefit decision-makers' and citizens' understanding of the overlay, and how it was created. What is more, the 3D technology used to explain the MHO could be advanced beyond a presentation visual aid and

evolve as a tool where it used in an environment where the users, like the public, could manipulate the maps and data themselves, and understand any ordinance better.

By using a map like the one explained above in the the Vis Space, its immersive environment could enable users to see and move the 3D model right next to a static image or document that describes it. With 7 screens available in one space, each providing the opportunity to display something different, the Vis Space creates a powerful environment for the complete understanding of any presented information. There would be no back-and-forth from one slide to another, like what happened during the JLUS. At the public hearing for the JLUS implementation of the MNO, Assembly member Diane Hutchison requested to view a slide that was a few slides back, asked to skip forward, and then go back (Audio Track 5, 2015). Moments like what happened with Hutchison, which happen regularly in the Assembly Chambers, beckon for the borough's consideration of the use of the Vis Space.

Several facets of the DCP's workings could benefit from the use of the Vis Space and other decision-making technologies and methodologies coming from the university. Technology is slowly making its way into the decision-making environment of the FNSB, and if decision-makers continue to experience its benefits and potential applications in their process, eventually technological engagement strategies might be more easily incorporated into the process. The following example demonstrates FNSB decision-makers' readiness for technological advancements, as well as the effectiveness of incorporating some technology-based strategies into their decision-making processes. The DCP fought to ease the process for volunteer commissioners and Assembly members, and improved the general functionality of meetings as a result. To explain, historically PC members were required to read massive amounts of

information in a paper format before the commission meetings. The DCP recognized how costly and inefficient printing, binding, and distributing these large packets was and, as a result, provided these community volunteers with iPads. iPads have eased the process of data delivery to the decision-makers and have contributed to their better understanding of the presented information. Traditionally, before the digital version of the decision-makers' information packets existed, if a question arose during a meeting, there would likely be a distracting moment where decision-makers flipped through pages of their booklets, searching for information they had noticed prior. Now, with the portable document file (PDF) version of the booklet available to each of these members via their iPads, discussion is able to flow. With the useful ability to highlight, bookmark, define, and search, decisions are achieved with less deliberations. The iPads have tremendously improved the process and, overall, encouraged the use of new technology.

Due to the success of the iPads, other technologies, like the use of the Vis Space, should be considered more greatly by the FNSB. Howard and Gaborit (2007) specifically discussed the use of virtual environment technologies to improve public participation in the planning process. They noticed that the limitations to planning consultations included a lack of interactivity and a lack of immersion into the planning issue being discussed. Citizens were not connecting with the data. Citizens do not typically get to navigate freely on the FNSB GIS maps or choose their own perspectives of the maps when they go to the DCP counter in hopes to learn about a property. Even by providing citizens access to the mouse while navigating the map could remedy a trust or communication challenge, and give some greater access to citizens. These limitations imposed on citizens, when they are standing in front of the computer, staring at software that they could

use, but do not know how to use, can explain the lack of interest in urban planning from the public (Howard & Gaborit, 2007). El Araby studied the possibilities and constraints related to virtual environment technologies (2002) and found evidence to suggest that the use of such technologies will improve the credible images of any proposed project at any urban setting for users, designers, and decision-makers. El Araby learned from this evidence that city officials and the public "can reach better decisions regarding proposed projects within their towns and cities" utilizing these technologies (El Araby, 2002).

In describing the relationships sought after between planning departments and universities, Feld (1998) noted that the challenges mentioned included actually institutionalizing the partnership between universities and the communities within which they exist and ensuring that the town or city became an integral part of the university's core research, teaching, and public service efforts. Luckily, for the community of Fairbanks, this type of integration already exists in many ways. UAF is known for its sophisticated and advanced research on the Arctic, where the FNSB exists. Being a land, space, and sea grant institution, UAF has done a considerable amount of research about the very soil on which Fairbanks residents have built their homes. In conjunction with heightened engagements, work trades, research, and exposure, good, responsible land use planning could evolve from connecting community research and the university with community needs via the DCP.

C. Develop and Implement an Outreach Plan

With the lack of engagement observed during the JLUS project, policy-makers began focusing on designing robust outreach strategies, and applied some tactics to the FNSB

Marijuana Zoning and Rethinking Smith Ranch case studies. The hard work that went into curating logical, tailored, and effective outreach strategies for these case studies was useful and citizens became highly involved in the processes that needed their involvement. Sarah Elwood (2002), who focuses her research on empowerment for citizens, found that governing municipalities still play a central role in planning, but community organizations have now experienced a call to own direct responsibility for planning and problem-solving in their local communities. As Day (1997) noted, the collection of literature on citizen participation in planning seems to be an untidy one. It is untidy as there is considerable confusion about what participation looks like in practice, and little consensus about what exactly citizen participation is supposed to accomplish, or what marks a good participation process. Three years after Day's (1997) paper was published, Sanoff (2000) argued Day's stance on citizen participation. If planners, and the planning literature, are unable to agree about the definition of participation, then challenges will always exist in regard to effective communication in the planning sphere.

Outreach is a popular topic among planners, with the typical goal of citizen engagement or public participation (Sanoff, 2000). Most of the webinars the researcher attended during the participant observation study focused on some sort of outreach that did or did not work for various communities around the country and world. While most of the recommendations made for engaging citizens were technology-based, which has been established to be a challenge for the FNSB, there were enough ideas from which to generate a sound outreach plan for the DCP. Had there been a structured, proven method to engage citizens in the borough, and a rubric to follow for outreach, the amount of effort that went into strategizing outreach for the individual case studies could have been minimized, enabling resources and staff to be more available for

other needs of the DCP, and thereby remedying another challenged of the DCP - being understaffed with a huge workload.

A department-wide outreach rubric and effort could also increase the transparency of a process, which inherently motivates participation. A transparent process is a good one, as it allows for the impact of decisions to be understood by the people who make them (Sanoff, 2000). Outreach seeks awareness, perception, decision-making, and implementation (Sanoff, 2000). Heightening those factors would solve challenges for the DCP related to engagement, a lack of trust, and land use challenges due to weaknesses in local government, and the expression of difficult or complicated information.

To help with outreach for the FNSB, utilizing the Vis Space at UAF is a recommended component of a suggested outreach plan that the DCP needs to create in order to facilitate greater communication with the community and with each other. As of January 2017, with a goal to lay out a pathway for citizen engagement, an outreach plan had been started. In its completion, the outreach plan, specific to the community of Fairbanks, should include suggestions that, will hopefully enhance a positive perception of the work that the DCP does. The citizens will hopefully realize the kind of power they have for all planning-related matters.

A good example of collecting effective strategies for outreach and documenting them is found in the FNSB Marijuana Zoning case study. During the "How To Get Your Commercial Marijuana Facility Zoning Permit" workshops held in February 2016, several forms of outreach were listed on the sign in sheet. The check marks under each of the categories from both nights created Figure 5 which, as of January 2017, was a part of the draft outreach plan. An overwhelming number of individuals heard about the workshops by word-of-mouth. Several

others saw the advertisements in the *Fairbanks Daily News-Miner*, a local newspaper. Facebook and other internet-based strategies like posting on the FNSB website, and utilizing the newspaper's online community flyer board, were the least successful. The posters which were hung around town, and distributed to potentially interested businesses, were effective, but not as effective as the ad in the newspaper. As a result of this small, informal survey, the outreach plan has a general foundation from which to grow.

The Rethinking Smith Ranch case study provided more valuable data on which types of outreach work best in Fairbanks. While the door-to-door conversations were hit or miss, when the planners did get to engage in dialogue with a resident, it typically resulted in a positive outcome, and several attendees at both meetings were there as a result of these efforts. Large posters were hung throughout the neighborhood and information sheets (not letters) were placed in each resident's mailbox by someone from the DCP. If personal, engaging, and effective outreach efforts were implemented as permanent strategies into an outreach plan for the FNSB, or even just the DCP, communication with citizens could grow to be valuable to a planning process. Valuable citizen involvement would differ from the planners' sole need to check a box off for the federally mandated planning and outreach process.

For Fairbanks, the outreach plan should also list places around town to hang posters. The community is well set up to publicize events, classes, and sales via hanging posters, as several local establishments host bulletin boards or windows designated for posting flyers. During the span of the participant observation study, the researcher developed a list of over 75 potential locations to hang flyers in Fairbanks. While this method was not proven to be most effective in reaching citizens for the "How To Get Your Marijuana Facility Permit" workshops, it worked in

reaching residents of Smith Ranch, and, over time, if implemented into the outreach plan strategy, could broaden the reach potential for planners desiring public engagement.

The outreach plan should also include the more successful outreach strategies used to advertise workshops during the participant observation study, like radio and newspaper ads, and should recommend areas around town for the DCP to be physically present to answer questions about FNSBC Title 18 and other workings of the department. This type of outreach depends on the staff to promote the department's social media sites, booths at community events, and other DCP efforts via word-of-mouth (Bohman, 2016). The challenge here is a staffing issue in the DCP and such programs would work best if an outreach coordinator was hired for the department, or possibly the FNSB as a whole. Ultimately, to reach an effective state of communication with the citizens of the FNSB, public presence should be the primary focus of the outreach plan. Immediate implementation of a tailored, FNSB specific outreach plan would greatly benefit communication with the citizens and their engagement with the DCP.

In creating an outreach plan for the DCP of the FNSB, the opportunity for crowdsourcing should be presented. Perhaps the FNSB and UAF could work together to stage computers during a time of public input, or the Assembly could broadcast an important meeting from the Vis Space at UAF in an effort to reach more individuals in the technologically-aged community of the borough. The potential outreach plan should also aim to rectify planners current stance on their roles in planning for the community. Catanese (1974) noted that if planners were to adopt the activist role (among his defined technocratic or participatory roles) in planning for their communities, they could contribute significantly more to planning for their urban environments. He defined, "the technocratic role is the traditional planning role of claiming to speak for the

common good of the community, eschewing attachment to special interests, and solving urban problems through the application of technical expertise. The participatory role, which is similar to that of advocacy planning, rejects the notion of planning for a public good and instead seeks to involve people in ways that will create political support for the planning objectives" (Catanese, 1974, p. 18). In Cantanese's recommended role of the activist, planners are deeply involved in the political process, and often are elected leaders' political aids.

D. Additional Considerations

While the recommendations for the next steps toward achieving better communication with the citizens of the FNSB and overcoming the challenges shown in Figure 1 generally conclude the discussion of this opus, a few more additional items are worth discussing.

1. Foster Place Attachment

The next beneficial step the DCP could take for the FNSB's citizens is to strategize fostering place attachment among citizens. For starters, while many Alaskans accept the necessity of government for providing certain services, like health, safety, welfare and education, citizens of Alaskan communities like the FNSB, often express concerns about the way government operates. As discussed, many Alaskans express a strong dislike for government, and Thomas et al. (2016) found that this dislike stems from general antigovernment attitudes about land use regulations and environmental controls in particular, which are essentially the responsibilities of the FNSB and its DCP. In consideration of these sentiments, it can be understood why the FNSB regularly faces negative feedback on land use regulations and enforcements. As exemplified by some of the noted minutes from the early Rethinking Smith

Ranch meetings, as well as the *History of the Fairbanks North Borough* (Reed, 1979), the implementation of the second-class borough designation was met with negativity in its early phases. Citizens were, and remain, apprehensive toward welcoming governmental decision-making into the community.

The literature shows that negative perceptions like those mentioned above could be remedied by the fostering of place attachment (Manzo & Perkins, 2006). The growing library of research on place attachment has not been noticeably incorporated into planning strategies at the FNSB. This lack of incorporation on the FNSB's behalf is primarily because subsequent planning literature has neglected the exploration of critical connections, particularly how meaning and attachment to place can play a pivotal role in planning processes (Manzo & Perkins, 2006). Due to the staffing challenges previously mentioned, the necessary time is not available to the planners to research and implement newer strategies. Manzo and Perkins (2006) found that residents' abilities and willingness to address local problems are typically influenced by their emotional commitments to their community places, and these commitments are critical to the well-being of neighborhoods, as they can motivate residents to participate in their communities and work to improve and protect them (Brown, Perkins, & Brown, 2003). It is essential for those working in community improvement and planning to better understand emotional connections to places, how they are fostered, and how they might lead to action and effective participatory planning processes. Brown, Perkins, and Brown (2003) noted that while participatory planning processes and determining citizens' attachment to place is time-consuming work, it is essential to effective participatory planning and will improve the communities that form the common ground upon which we live our daily lives. Given that the DCP is already

understaffed, and the citizens disconnected to the general happenings of the DCP and its land use planning measures, Brown et. al (2003) make an applicable point to the state of engagement citizens feel with the DCP, and further motivate the recommended solution of aiding citizens in the fostering of attachment to the place they call home. The DCP would benefit from researching what might help foster place attachment for citizens, could perhaps outsource the research as a project to a UAF student and implement the other recommended solutions determined by this opus. By implementing place attachment strategies into the outreach plan, the community could benefit and the communication between citizens/citizen groups, policy-makers, and decision-makers would ultimately improve.

2. Find the Gaps

In conjunction with fostering place attachment among citizens of the FNSB, conducting a needs assessment would also be valuable to both the community and DCP. When building comprehensive plans for communities, a step called 'visioning' is usually incorporated. Visioning is different from a needs assessment in that it seeks to determine how residents envision their community in the next five, ten, or 20+ years. A needs assessment variably identifies the gap between what exists and what should be (Gupta, 2011), or what the citizens confirm they want in the visioning process. The zoning, while complicated, is still in development in the FNSB and, as a result of zoning errors, some uses are not compatible with others in the region. A DCP focused needs assessment, or one that focuses on land use goals for the community, could determine remedies for such zoning errors as well as how such work could result in fewer conflicting land uses in an area.

In undertaking a needs assessment, the DCP would explore similar tactics to those tactics utilized during the JLUS case study. The JLUS did not solely identify current problems and conflictive uses of land, but did identify how uses could worsen existing incompatibilities over time. The potential for greater incompatible land uses resulted in this recommended strategy to remedy land use conflicts altogether.

While the extent of the literature on community planning-based needs assessments is lacking, some planners and citizen engagement specialists have begun a conversation to change that. *The Community Toolbox*, an online resource for policy-makers who are working to build a healthier community discusses needs assessments (2016). The following key points from *The Community Toolbox* corroborate what the DCP would gain upon proctoring a needs assessment:

- It will help staff gain a deeper understanding of the community. Each community has its own needs and assets, as well as its own culture and social structure -- a unique web of relationships, history, strengths, and conflicts that defines it. A community assessment helps to uncover not only needs and resources, but the underlying culture and social structure that will help staff understand how to address the community's needs and utilize its resources.
- An assessment will encourage community members to consider the community's assets and how to use them, as well as the community's needs and how to address them. That consideration can (and should) be the first step in their learning how to use their own resources to solve problems and improve community life. It will help make decisions about priorities for program or system improvement.
- It goes a long way toward eliminating unpleasant surprises down the road. Identifying needs and resources before starting a program or initiative means that you know from the beginning what you're dealing with, and are less likely to be blindsided later by something you didn't expect.

These factors further encourage undertaking the process of conducting a needs assessment for the FNSB, especially when considering how beneficial it could be to understanding what the community needs, what its assets are, and what could be done to close the gap between what

exists and what should be what citizens desire. This would also require further exploration of the community engagement techniques listed in this document and give the DCP the opportunity to utilize and refine its potential outreach plan. A needs assessment of the FNSB should be considered in the implementation of any recommendations listed as a result of known challenges to citizen participation in land use planning efforts.

3. Collaborate Between Policy-makers

In the effort to streamline the tasks and limitations of the policy-makers in the DCP, as well as ensure that situations like Nunley's in Text Box 2 do not prevail in times of haste or busyness, the DCP strategies and protocols should be further defined and put in place. Weekly, or bi-weekly, regular meetings would strongly benefit DCP and communicate to each employee the changes in code, needs of citizens, or scheduling conflicts throughout the DCP. While brief, this recommendation could dramatically alter the way the citizens perceive the DCP, and could prohibit situations like what Nunley experienced.

E. How These Solutions Relate to Communication

Each of the above solutions relates to communication as they promote engagement by encouraging conversation between the community and the DCP (Sanoff, 2000). In addition, the solutions provide opportunities to create productive conversations with decision-makers that are not impeded by technical jargon, but rather provide thoughtful, fluid, and inclusive expertise on the subject matter by utilizing communication tools, such as the Vis Space at UAF. These recommendations hold the potential to improve the decision-making process and its conclusions with competent and implementable solutions that include the desires, visions, and plans of the

APPLICATION OF SOLUTIONS TO CHALLENGES OF CASE STUDY						
CHALLENGES	SOLUTIONS					
	legitimize the agency's role in planning for the community	tighten relationship with UAF to utilize existing community resources	foster a greater, community wide sense of place attachment	develop and implement an outreach plan	perform a needs assessment	collaborate between policymakers
involving the public		X	X	X		
limitations on planning authority	X	X	X	X	X	X
skepticism of the fnsb & the DCP	X	X		X		X

Table 4 - This table shows how the recommended solutions apply to the challenges that were observed throughout the case studies.

APPLICATION OF SOLUTIONS TO CHALLENGES NOT DIRECTLY LINKED TO CASE STUDIES						
CHALLENGES	SOLUTIONS					
	legitimize the agency's role in planning for the community	tighten relationship with UAF to utilize existing community resources	foster a greater, community wide sense of place attachment	develop and implement an outreach plan	perform a needs assessment	collaborate between policymakers
technology saturated field		X	X	X		X
lack of support from DM's	X	X	X	X		X
Alaskan's general dislike for government	X	X	X	X	X	
limited resources/ understaffed department		X		X		X

Table 5 - This table defines the way the recommended solutions apply to the challenges listed throughout the case studies.

citizens within the community. Implementing these recommended solutions should build confidence and trust in the DCP, legitimizing the planning department's role in the borough (Creighton et al., 1983). To aid in the reader's visualization of how the recommended solutions found in this section apply to the challenges discussed throughout this opus, Tables 5 and 6 have been provided. Table 5 shows how these recommended solutions apply to challenges that were discussed in the scope of the case studies in this opus, and Table 6 does the same for the challenges not directly linked to the case studies.

VII.Conclusion

This document examined the themes of the (1) challenges related to accomplishing goals, (2) importance of communication, and (3) potential solutions to overcoming said challenges of the FNSB's DCP. Based on an 18-month participant observation study, the researcher observed recurring challenges faced by the DCP, and expressed them in this opus via three case studies (i.e., FNSB Marijuana Zoning, The Joint Land Use Study, and Rethinking Smith Ranch). Seven separate challenges were discussed throughout this document, and each challenge was observed either during the case studies or during the participant observation study altogether (i.e., challenges not directly linked to the case studies). The document focused primarily on the importance of communication among the participants seen in Table 3, including citizens/citizen groups, policy-makers, decision-makers, and within the department itself.

The FNSB Marijuana Zoning case study demonstrated how an understaffed planning department can end up focusing every staffing resource on one project, resulting in a gap where attention is not properly allocated to other needs and projects. Weaknesses in existing local government decision-making and outreach structure were a significant observation of the

participant observation study, as well. The researcher realized early in the participant observation study that developing responsible land use initiatives, and implementing them with the help of the public, is challenging in the FNSB. Public involvement was discussed generally, and in terms of the various case studies. While the FNSB Marijuana Zoning case study provided the DCP with a good starting outreach framework, challenges persist in reaching a wide group of citizens with the limitations expressed in Section IV.

The Joint Land Use Study was valuable to include because it examined the challenges faced by the DCP in terms of effective articulation of technical information, examined the lack of trust in/negative perceptions of the FNSB and the DCP, and challenged the concept of public involvement with a story about an anti-war protest which impeded the communication process between the DCP and the decision-makers. The Rethinking Smith Ranch case study was necessary to include in this opus as well, as it showcased how negative perceptions of the borough can persist until an effort is made to change such perceptions. Rethinking Smith Ranch also demonstrated the challenges of motivating public involvement. The work that went into preparing for the conversations with residents of the neighborhood made the researcher aware of the resource/staffing challenges that the department faces. Ultimately, the outreach efforts of the policy-makers involved in this case study evolved to an award winning process (Woldstad, 2016), which encouraged the development of an outreach plan to eventually be implemented within the DCP outreach criteria.

Based on the challenges that were observed through the three case studies, as well as the observations made throughout the duration of the participant observation study, and an extensive literature review, a series of recommended solutions arose. By calling on decision-makers like

the FNSB Assembly and mayor to support the DCP to act on land use issues, the challenges of land use conflicts and negative perceptions could be remedied. Citizens need to see that the DCP is not just working to regulate the land, but is also working to serve the people who dwell on it. The recommended potential solutions exhibited in the previous section would ultimately provide a greater sense of what the community needs by fostering a sense of place attachment and developing an outreach plan that is tailored to the community of Fairbanks. Developing and abiding by an outreach plan is the first step toward achieving a consistent level of citizen engagement in land use planning. An outreach plan for the FNSB DCP would ideally envelop the recommendations of this opus which resulted from examining the challenges faced both during the case studies and outside of the case studies.

If the staff of the FNSB's DCP decides to seek the public's input using the quality engagement strategies as witnessed through the FNSB Marijuana Zoning, Rethinking Smith Ranch, and JLUS case studies, the public participation process will undoubtedly grow along with the borough's understanding of its relatively young community structure. Ghose (2005) expressed it well when she wrote, "citizen participation at the local scale is a crucial element to gaining a voice in planning and policy-making activities" (p. 61). The FNSB and DCP should strive to hear what the citizens have to say, and citizens/citizen groups should understand the ideas, policies, information and more that the DCP is aiming to communicate to them.

VIII. Appendices

APPENDIX A

Acronyms

DCP ..... Department of Community Planning
DM ..... Decision-makers
DoD ..... Department of Defense
EAFB ..... Eielson Air Force Base
FNSB ..... Fairbanks North Star Borough
FNSBC ..... Fairbanks North Star Borough Code
FWW ..... Fort Wainwright Army Base
GIS ..... Geographic Information Systems
JLUS ..... Joint Land Use Study
MNO ..... Military Noise Overlay
MHO ..... Military Height Overlay
MJ ..... Marijuana
PC ..... Planning Commission
PDF ..... Portable Document Format
UAF ..... University of Alaska Fairbanks

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